Research.

RESEARCH PROJECTS IN MEDICINE AND ALLIED SCIENCES IN AUSTRALIA.

THE following is a list of research projects being carried out in Australia in the fields of medicine and the allied sciences. The previous list was published in the Journal on June 25, 1960. The present list is as nearly complete as we were able to make it from available information. It is presented in two sections: (i) to the centre of page 6—information supplied by grant-making bodies; (ii) from that point to the end—information supplied by research institutions. We extend our thanks to those who have replied to the *questionnaire* sent out, from which the list was compiled.

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Institute of Medical Research, Royal North Shore Hospital of Sydney.	Biochemistry.	1. Biosynthesis of hæm *a* and other hæmoproteins using Fe^{59}. Subsidiary to this: a study of the best method for estimating hæm *a* in the presence of phospholipids and protohæm. 2. Study of hæm *a* compounds. (*a*) Further study of hæmoproteins *a* spectra and their compounds with CN and other ligands. (*b*) Elucidation of the reaction of hæm *a* and other formylhæms with alkali-denatured proteins. (*c*) Study of cytochrome oxidase itself in comparison with other hæmoprotein *a* and their catalytic activities. 3. Final work on the chemistry of porphyrin *a*; the nature and attachment of the long alkyl side chains. 4. Biosynthesis of porphyrins. 5. Lactoperoxidase. 6. Chemistry of the prosthetic group of cytochroma a_3. Investigation of the proteins and enzymes of normal and pathological thyroid tissue.	R. Lemberg. P. G. Stanley.	N.H. & M.R.C.
Univ. Melbourne.	Biochemistry.	Thyroid metabolism. (*a*) Studies on enzymes of the endocrine glands with particular reference to those of the thyroid and adrenal glands. Mechanism of thyroid hormone biosynthesis. (*b*) Goitre project. Isolation of natural goitrogens. Testing of milk fractions from animals fed suspected plants. Continuation of studies on factors controlling biochemical adaptation to exercise: (*a*) Extension of work on permeability of muscle membranes to electrical stimulation. (*b*) The response of phosphohexokinase, known to be a limiting enzyme in metabolism, to exercise stimuli. (*a*) Nucleic acid metabolism and the biochemistry of adaptive enzymes. (*b*) Conditions determining secretin levels in the duodenal mucosa of experimental animals. Determination of the chemical structure of hitherto undescribed phospholipids, their distribution in animal tissues and their exchange with radioactive inorganic phosphate.	T. H. Oddie. V. M. Trikojus. W. A. Rawlinson. J. W. Legge. F. D. Collins.	
Univ. Sydney.	Biochemistry. Pharmacy.	The study of the function of lipids of erythrocytes. (i) Study of the nature of the electron transport system in respiring yeast particles. (ii) Mechanism of the cellular accumulation and transport of organic molecules. (i) Azo dyes. (ii) Metabolism of drugs.	W. S. Hensley. G. M. Kellerman. A. W. Linnane. S. E. Wright.	
Univ. Adelaide.	Biochemistry.	Development of the column chromatography of protein, using cellulose ion-exchange resins.	E. S. Holdsworth.	
Alfred Hospital, Victoria.	Baker Medical Research Institute.	(*a*) Blood coagulation problems in relation to open heart surgery. (*b*) Separation and identification of coagulation-promoting lipids. (*c*) The influence of snake venoms on blood-clotting factors. Serum proteins in kuru.	P. Fantl. C. C. Curtain.	
St. Vincent's Hospital, Victoria.	School of Medical Research. Clinical Biochemical Laboratories.	Enzyme structure in relation to catalytic activity. (*a*) Measurement, isolation and characterization of serum haptoglobin. (*b*) Studies on serum haptoglobins in various conditions. (*c*) Studies on myeloma globulin, macroglobulin and other anomalous serum protein.	P. Edman. H. Smith.	
Walter and Eliza Hall Institute.	Clinical Research.	(*a*) Investigation of the chronic disease which may be caused by or associated with the formation of auto-antibodies. (*b*) The study of diseases of the gastro-intestinal tract aided by biopsy procedures, improved methods of biochemical investigation, and gastrophotography. (*c*) Continuation of the long-term investigation of chronic gastritis.		
Univ. Sydney.	Medicine.	(i) Studies of the splanchnic circulation, liver and spleen, with special reference to patients with cirrhosis of the liver. (ii) Studies in mineral metabolism, especially calcium and phosphorus. (iii) Studies of fat absorption from the intestinal tract of man. Leukæmia, with special reference to phospholipid and other metabolic changes in the leukæmic cell in vivo and in vitro.	C. R. B. Blackburn. B. G. Firkin.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Royal Melbourne Hospital.	Medicine.	Studies in coronary disease.	R. R. H. Lovell.	N.H. & M.R.C.
Univ. Adelaide.	Medicine.	(1) Continuation of investigations of circulating thyroid hormones in health and disease. (2) Continuation of studies of intracellular effects of salicylate, thyroid and adrenal hormones.	M. L. Wellby.	
Walter and Eliza Hall Institute.	Experimental Biology.	Experimental biology and associated activities.	Macfarlane Burnet.	
Alfred Hospital, Melbourne.	Diabetic and Metabolic Unit.	(1) Investigation into insulin antagonist. (2) Investigations into insulin synthesis by perfused cat pancreas. (3) Investigations on steroid metabolism. (4) Thyroid physiology. (5) Clinical studies on diabetes mellitus. (1) Influence of gonadotrophins on the levels of androgens in plasma. (2) Determination of testosterone secretion rates. (3) Estimation of testosterone in plasma.	J. Bornstein. B. Hudson.	
Univ. Melbourne.	Pathology.	Effects of various hormones and vitamins on bone. Study of renal conditions employing a new microdissection technique.	E. Storey. Nancy Hayward.	
Univ. Sydney.	Pathology.	Osteogenesis in normal and rhachitic rats. Study of jelly-fish of medical importance and other related forms in Australian and other seas.	D. A. Cameron. R. V. Southcott. South Australian Museum.	
Red Cross Blood Transfusion Service, Sydney.		(*a*) Investigation of the chemical nature of the soluble iron liberated by acid-peptic digestion and by alkaline-tryptic digestion. (*b*) Investigation of substances which enhance iron absorption, such as ascorbic acid and cysteine. (*c*) Study of the role of chemical substances in foods, such as phytic acid, which form insoluble iron compounds and which are thought to prevent absorption.	R. J. Walsh.	
St. Vincent's Hospital, Melbourne.	Medicine.	Red cell destruction and formation, with particular reference to red cell metabolism in congenital and acquired hæmolytic anæmias.	G. C. de Gruchy.	
Univ. Queensland.	Physiology.	Investigation of the beta protein pattern in aborigines.	O. E. Budtz Olsen.	
Institute of Medical and Veterinary Science, Adelaide.		Survey of the anæmias of pregnancy.	R. N. Ibbotson.	
Fairfax Institute of Pathology.		Studies on staphylococcal epidemiology.	Phyllis Rountree.	
Univ. Melbourne.	Bacteriology.	(*a*) Antagonists to isoniazid. (*b*) Anti-tuberculosis activity of phenanthrolenes. (1) Mechanisms of inherent resistance of different mouse strains to tuberculosis. (2) Influence of size of infecting dose of the immune phase of experimental tuberculosis. (3) The duality of tuberculin hypersensitivity. (*a*) Tryptophan biosynthesis. (*b*) Metabolism of vitamin K derivatives by micro-organisms. (*a*) Genetic transduction in *Pseudomonas aeruginosa*. (*b*) Host-induced modification in *Pseudomonas* phages. (*c*) Genetic transduction in *Staphylococcus pyogenes*. Mode of action of isoniazid. (*a*) Effects of phenanthrolenes on viral multiplication. (*b*) Studies on rabbit papilloma virus. (*c*) The possible role of viruses in mesenteric adenitis.	S. D. Rubbo. D. F. Gray. F. W. Gibson. B. W. Holloway. Jean Youatt. D. O. White.	
Univ. Adelaide.	Bacteriology.	Study of mouse macrophages in vitro. Salmonellas.	D. Rowley. Nancy Atkinson.	
Royal North Shore Hospital of Sydney.	Institute of Medical Research.	(1) Continuation of examination of soil samples for the presence of keratinophilic and other pathogenic fungi. (2) Continuation of work on presence of air-borne fungus spores in the atmosphere, their relation to allergic diseases and preparation of extracts for the diagnosis of allergy.		
Univ. Sydney.	Bacteriology.	Study of virus multiplication and the mechanism of cell damage by virus, using ectromelia infection in the mouse as a model.	P. M. de Burgh.	
Univ. Melbourne.	Anatomy.	(i) Continuation of research programme on the peripheral nervous system with particular reference to nerve fibre-muscle fibre ratios (trochlear nerve and superior oblique muscle); remote effects of injuries to nerves; connective tissue of peripheral nerve; stress-strain phenomena in nerve roots and denervated peripheral nerves. (ii) Morphology blood supply and neural relationships of pineal body. (iii) Study of Melbourne child growth. Neuropharmacological and neurophysiological studies.	S. Sunderland. C. W. Dunlop.	
Univ. Sydney.	Queen Elizabeth II Research Institute for Mothers and Infants.	(i) Studies of peri-natal mortality employing the fœtal heart rate monitor. (ii) Development of a suitable histo-photometer for studies of D.N.A. content of tissue nuclei. (iii) Construction of an exposure meter for the electron microscope for further studies by Associate Professor David A. Cameron.	B. T. Mayes.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Univ. Adelaide.	Department of Child Health.	(i) Impact of congenital heart disease upon the family. (ii) Determinants of coronary blood flow and myocardial metabolism. (iii) Study of the growth of children with congenital heart disease.	G. M. Maxwell.	N.H. & M.R.C.
Univ. Syd.	Pharmacology.	Continuation of cardio-vascular studies and relationship between chemical structure and pharmacological action.	R. H. Thorp.	
Univ. Melbourne.	Pharmacology.	Mechanism of ionic discrimination in the muscle cell, and the nature of bioelectric potentials.	F. H. Shaw.	
Sydney Hospital.	Kanematsu Institute of Pathology.	(*a*) Lipid metabolism related to atherogenesis. (*b*) Metabolic studies in starvation related to renal failure.	H. M. Whyte.	
Univ. Melbourne.	Physiology.	Histological work with regard to salivary glands and other investigations in the Department. (1) Use of complex inorganic cations in the investigation of biological mechanism. (2) Use of bemegride. Tissue injury electrocardiography. (*a*) Study of the ionic basis of electrical activity in mammalian smooth muscle. (*b*) Study of salivary gland secretory potentials, especially of sheep parotid gland, using intracellular techniques for measurement of membrane potential and membrane resistance. (*c*) Measurement of membrane resistance of toad skeletal muscle fibres during negative after-potential. Effect of drugs on this resistance. Identification of source of the humoral stimulus to adrenal aldosterone secretion and the defraction of the specific stimulus causing release of this trophic hormone. (i) Electromyographic studies of muscle function. (ii) Adaptation of intracellular techniques to a study of the behaviour of biological membranes to constant current stimulation. (iii) Development of instrumentation for a variety of research problems in the Departments of Physiology and Pharmacology as required.	R. D. Wright. R. D. Wright. A. Shulman. E. R. Trethewie. Mollie E. Holman. D. J. Dewhurst.	
Univ. Melbourne.	Zoology.	Autonomic nerve-smooth muscle physiology.	G. Burnstock.	
Univ. Sydney.	Physiology.	Brain Research Unit. (*a*) Aging in hypophysectomized rats. (*b*) Aging in amœba and rats.	P. O. Bishop. A. V. Everitt.	
Univ. Queensland.	Physiology.	(i) Investigation of physico-chemical and pharmacological properties of the oxytocic substance which has been found in extracts of blood and hypothalaml of various species. (ii) Estimation of level of oxytocic hormone in blood of man and other species in various conditions. (iii) Investigation of properties of the oxytocic factor recently found in semen (human and sheep). Study of lipotropic effect of ethyl trichloracetate on the livers of choline-deficient rats and of intermediate metabolism of the liver so as to discover the mode of action of this drug. Effect of posterior pituitary hormones on renal function in the sheep and human. Action of salicylates on peripheral blood vessels.	R. W. Hawker. C. C. Kratzing. R. B. Cross. R. J. Ladd.	
Univ. Adelaide.	Physiology and Pharmacology.	Investigation of mechanism of action of 5-hydroxytryptamine and other cardio-vascular-acting substances using blood pressure measuring techniques in human subjects and certain selected patients.	S. L. Skinner.	
Univ. Western Australia.	Physiology.	(*a*) Formation of lymph: Regulation of blood flow and of capillary blood volume in the intestines. Fat absorption and intestinal motility: Steady state experiments, using an unabsorbable reference substance, on fat absorption and on the emptying of the terminal ileum. (*b*) Iron metabolism: Iron transport by the marsupial breast. Storage and transport of iron under conditions of depletion and excess in rats. Effect of biliary diversion on fat absorption and intestinal motility. Continuation of work on chemical structure of biologically active mucoproteins, special attention being given to the type of linkage joining the carbohydrate-prosthetic group to the protein core. Bioassay for aldosterone, using total body K/Na ratio in the normal mouse receiving saline.	W. J. Simmons. R. G. H. Morgan. A. Gottschalk. D. B. Cheek.	
Walter and Eliza Hall Institute.		Studies in mouse leukæmia.	D. Metcalf.	Anti-Cancer Council of Victoria.
Univ. Melbourne.	Bacteriology. Botany. Chemistry. Chemistry (Organic). Medicine. Obstetrics and Gynæcology	Studies on the virus of rabbit skin papilloma. A study of the gibberellin content of developing, mature and dormant seeds. Radiation detectors. The effect of heat on some foodstuffs. The mechanisms of anæmia in lymphomas and chronic leukæmias. Cellular index of sensitivity to ionizing radiation.	D. O. White. K. G. M. Skene. J. F. Duncan. J. Wilmshurst. G. C. de Gruchy. W. Chanen.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Univ. Melbourne.	Pathology.	Azo-dye carcinogenesis.	P. Hughes.	Anti-Cancer Council of Victoria.
		Electronmicroscopy of viruses in tissues.	N. Xeros.	
		Tumour cells in transparent ear-chambers.	I. K. Buckley.	
		Study of various tumours and of leukæmia by fluorescein-globulin stains.	A. Bremner.	
		Dimethylnitrosamine (pyridine nucleotide metabolism).	M. Bailie.	
		Congenital abnormalities and carcinogens.	B. Stratford.	
		Naturally occurring and experimentally produced tumours in dogs.	A. Jabara.	
		Nucleic acids in normal and tumour cells.	D. W. Menzies.	
		Enzyme studies on liver carcinogens.	G. S. Christie.	
		Dimethylnitrosamine carcinogenesis.	R. Le Page.	
		Action of carcinogens of the dimethyl 4'-aminodiphenyl group.	E. S. J. King.	
		Electronmicroscopic studies.	S. V. Hohlov.	
		Electronmicroscopic studies of normal and neoplastic liver cells.	S. Weiner.	
		Activity of carcinogens.	S. Ovenden.	
	Pharmacology.	Metabolites in cancer urine.	P. J. Morgan.	
	Physiology.	Investigation of the action of adrenal steroid hormones.	D. A. Denton.	
		An investigation of mouse ascites tumours.	E. M. Trautner.	
			D. A. Coats.	
		Development as related to cancer of a continuous micro-injection technique.	S. Rose.	
			T. R. Bradley.	
	Surgery	Development of television as an aid to diagnosis.	G. Berci.	
		The isolated perfusion of tumour-bearing areas with cancer chemotherapy agents.	K. Cox.	
Baker Medical Research Institute.		Cellular enzyme systems in relation to neoplasia.	C. Kidson. A. D. McCutcheon. R. G. Wyllie.	
Prince Henry's Hospital.		(i) The immunological behaviour of carcinoma. (ii) The effect of X-ray radiation on the immune response of the guinea-pig.	S. Wiener.	
Royal Children's Hospital.		Study of leukæmia in children.	J. Colebatch.	
		Tissue transplantation and cellular immunology.	R. Fowler.	
St. Vincent's School of Medical Research.		Study of changes in the composition of plasma proteins.	P. Edman.	
Univ. Sydney.	Veterinary Physiology.	Development of methods of hormone or hormonal metabolite estimation in body fluids and studies on metabolism of steroids. Development of radio-isotope techniques for localization of site of action of steroid hormones. Synthesis and examination of compounds likely to have anti-œstrogenic activity, their biological testing and clinical trials.	C. W. Emmens.	N.S.W. State Cancer Council.
	Biochemistry.	Relationship between distribution and turnover of nucleic acids and amino-acid incorporation in developing chick embryo.	J. K. Pollak	
	Pathology.	(*a*) Study of normal osteogenesis. (*b*) Study of experimental osteosarcomas. (*c*) Study of normal and regenerating mucosa of the mouth.	D. A. Cameron.	
	Organic Chemistry.	Preparation of 3-aza- and 4-aza-steroids.	C. W. Shoppee.	
	Veterinary Pathology and Bacteriology.	Study of an inherited cystic condition of the skin of a special strain of Merino sheep which shows a predisposition to develop malignant changes in the walls of such cysts and an investigation of the epithelioma arising from such cysts.	H. R. Carne.	
	School of Public Health.	(*a*) Continuation of research into mechanism of the graft versus host reaction in radiation chimaerism. (*b*) Very low temperature storage. (*c*) Radioleukæmia—cytogenetic analysis of radio-induced leukæmia in the pre-leukæmic phase.	P. L. T. Ilbery.	
	Biochemistry.	Localization of contractile proteins in embryonic heart muscle.	H. L. Webster.	
	Pharmacy.	Investigation into metabolism (*a*) of œstrogenic substances in whole animals; (*b*) œstrogenic substances by isolated tissue preparations.	B. T. Brown.	
	Surgery.	(*a*) Localized perfusion with cytotoxic agents for inoperable cancer. (*b*) Intraarterial infusion of cytotoxic drugs only as a clinical investigation.	F. H. Mills.	
Univ. New South Wales.	Organic Chemistry.	(*a*) Synthesis of oligodeoxynucleotides containing a base which has been shown to have anti-cancer properties. (*b*) Synthesis of and study of the effects of inhibitors of an enzyme of pyrimidine biosynthesis—both *in vivo* and *in vitro*.	Mary H. Maguire.	
	School of Biological Sciences.	(*a*) In-vitro culture of bone marrow cells in presence of varying concentrations of oxygen and carbon dioxide. (*b*) Effect of H_2O_2 on growing yeast. (*c*) Effect of pO_2 and pCO_2 on induction of cytochromes by yeast. (*d*) Examination of relationship between fructose-1 : 6-diphosphate and galactosidase in yeast. (*e*) Investigation of quantitative change of aspartate carbamylase of bacteria in presence of the inhibitor carbamyl phosphonate.	F. J. Moss.	
	Physical Chemistry.	(*a*) Studies related to improvements in tritium counting techniques. (*b*) Mechanism studies in the labelling of tritium compounds for use in cancer studies.	J. L. Garnett.	
Univ. of New England.	Zoology.	(*a*) Study of morphogenetic effects of physically and physiologically induced modifications in diurnal activity rhythms in *Blattela germanica*. (*b*) Investigation of induction and transplantability of Harker and/or Scharrer tumours in various cockroaches.	A. F. O'Farrell. A. Stock.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Univ. of New England.	Zoology.	(c) Interactions between regeneration, morphogenesis and endocrine balance in insects.	A. Stock.	N.S.W. State Cancer Council.
Royal North Shore Hospital of Sydney.	Unit of Clinical Investigation.	Breast cancer. (a) Swollen arm after mastectomy. (b) Breast survey of women of cancer age. (c) Thyroid function in breast cancer. Blood volume studies relevant to cancer. Research on thyroid cancer.	F. F. Rundle.	
St. Vincent's Hospital, Sydney.		Evaluation of serial biopsies following irradiation of uterine cervix. Use of radioactive gold (Au^{198}) in treatment of carcinoma of uterine cervix.	K. A. McGarrity. K. A. McGarrity.	
Royal College of Obstetricians and Gynæcologists.		(a) Formation of a slide registry in association with all cases registered at the R.C.O.G. Gynæcological Cancer Registry, for investigation of, and results of treatment in, gynæcological cancer. (b) Investigation into relationship of blood groups, parity, race, circumcision, previous gynæcological disease and gynæcological cancer. (c) Study of the value of diagnostic cytology associated with gynæcological cancer.		
Univ. New South Wales.	Organic Chemistry.	It is proposed to synthesize cinnabarin and to extend the natural product investigation to the minor pigments of *Coriolus sanguineus*.	P. S. Clezy.	
Sydney Hospital.	Kanematsu Institute.	Investigation of 15 patients, followed over three years, who appear to be suffering from a hæmopoietic disorder, termed loosely the "myeloproliferative disorder". This disorder appears to fall in the borderland between benign and malignant hyperplasia of one or more marrow elements (erythrocytic, myelocytic, megakaryocytic). The group of patients followed in this department appears to be related to, but in many respects different from, chronic myeloid leukæmia and established myelofibrosis. The initial programme envisaged is to document fully the clinical, family and hæmatological data and then to extend investigations using the techniques of leucocyte histochemistry, splenic aspiration and the in-vivo survival and sites of destruction of erythrocytes.	R. J. Elvy.	
St. Vincent's Hospital, Sydney.	Pathology. Radiotherapy and Tumour Clinics.	(i) Evaluation of methods of detecting circulating cancer cells in peripheral blood. (ii) If above are proved, various observations on the effect of such cell counts under different stimuli. (iii) Application of a satisfactory method to the examination of regional venous blood during surgery for cancer.	J. M. Garvan. L. Atkinson.	
Royal North Shore Hospital of Sydney.	David Hughes Lab. Thoracic Unit.	Study problems of respiratory physiology occurring in patients, both medical and surgical, in the Thoracic Unit and to undertake clinical physiological research in relation to these patients. Continuation of studies in the electrophoretic analysis of gastric juice.	June M. Raine. D. W. Piper.	Post-Graduate Medical Foundation, University of Sydney.
Univ. Sydney.	Physiology.	Study and research in ophthalmology.	T. Ogawa (Japan).	
Univ. New South Wales.	School of Biological Sciences.	Continuation of research in schistosome dermatitis and the immunity of snails to trematode infection.	W. H. Ewers.	
Sydney Hospital.		Continuation of five-year follow-up study of patients suffering from hypertensive cardio-vascular disease.	G. E. Bauer.	
Univ. Sydney.	Medicine.	Continuation of research into drowning and related topics. Continuation of research being carried out in biophysics laboratory. Research in radiation biology and the uses of isotopes in medical research.	D. F. J. Halmagyi. K. T. Fowler. J. McRae.	
	Bacteriology.	Study of virus-infected tissue.	P. M. de Burgh.	
	Physiology.	Setting up of additional neuro-physiological laboratory for five post-graduate research Fellows.	P. O. Bishop.	
	Surgery.	Equipment for research in gastro-enterology. Research on the effects of incomplete ureteric obstruction.	J. Loewenthal. D. D. Arnold.	
Sydney Hospital.	Kanematsu Institute. Bacteriology.	Research on renal function. Investigation of staphylococcal infections.	H. M. Whyte. S. Fisher.	
Royal North Shore Hospital of Sydney.	Unit of Clinical Investigation.	Research in the surgical correction of mitral and aortic valvular insufficiency of the heart.	I. Monk.	
Royal Prince Alfred Hospital, Sydney.		Study of phospholipids in whole blood, their function and metabolism. Investigation of urinary cell excretion rate in relation to pyelonephritis.	B. G. Firkin. E. F. Thomson.	
	Gastro-enterology Unit.	Metabolic studies on patients with ileostomies to assess the effects of salt load, aldosterone and aldosterone antagonists on the handling of electrolytes by the small bowel.	N. D. Gallagher.	
St. Vincent's Hospital, Sydney.	Cameron Wing.	To measure compliance in emphysema and to determine the effect of intermittent positive pressure respiration with Bennett's respirator, on compliance in emphysema. Research into disordered lipid metabolism as the cause of coronary artery disease. Investigation by angiography of the retrograde filling of experimentally obstructed coronary arteries. Continuation of studies in coronary perfusion and aortic valve replacement.	P. J. Maloney. G. V. Hall. G. Michell. H. M. Windsor.	
Red Cross Blood Transfusion Service, Sydney.		Investigation of active physiological substances which inhibit smooth muscle stimulants—possibly present in eosinophils.	G. T. Archer.	

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Women's Hospital (Crown Street), Sydney.		Investigation of causes and treatment of recurrent and threatened abortion.	W. G. McBride.	Post-Graduate Medical Foundation, University of Sydney.
Univ. Sydney.	Surgery.	Radiological research in alimentary tract mucosal ulceration.	J. Saxton.	
Univ. New South Wales.	School of Biological Sciences.	Investigation of the influence of some steroid horones on chondroitin sulphate biosynthesis in embryonic cartilage.	K. G. Rienits.	
St. Vincent's Hospital.		Continuation of studies in the various factors responsible for malnutrition following gastrectomy. Study of alcoholic cardiomyopathy.	W. B. Hennessy. J. B. Hickie.	
Royal Prince Alfred Hospital, Sydney.		Continuation of research on the inhibition of gasuric secretion.	A. P. Skyring.	
Univ. Sydney.	Physiology.	Single unit analysis of lateral geniculate activity.	P. O. Bishop. W. Kozak.	Ophthalmic Research Institute of Australia.
Royal Victorian Eye and Ear Hospital, Melbourne.	Glaucoma Research and Investigation Unit.	(*a*) The detection of unsuspected glaucoma in adult patients. (*b*) The detection of capsular exfoliation of the lens in adult patients. (*c*) Investigation of patients with acute glaucoma to determine best methods of clinical management.	R. F. Lowe.	
Royal Hobart Hospital and Private Practice.		Project: treatment of thrombosis of the central retinal vein with human fibrinolysis (actase-ortho).	D. Waterworth.	
Royal Victorian Eye and Ear Hospital.	Pathology.	Electrophoretic survey of the serum protein pattern in ocular diseases.	D. Hall. C. H. Greer.	
John Curtin School of Medical Research, Australian National University.	Biochemistry.	The isolation and properties of lombricine phosphoryl transferase and its substrate, *N*-phosphoryllombricine.	H. Rosenberg. T. J. Gaffney. A. H. Ennor.	Australian National University.
		Experiments on the distribution and biosynthesis of 2-aminoethyl *l*-2-amino-2-carboxyethyl hydrogen phosphate and its *d*-isomer.	A. H. Ennor. H. Rosenberg.	Rockefeller Foundation.
		The origin of *d*-serine in the earthworm.	A. H. Ennor. H. Rosenberg.	
		The mechanism of the activation of phosphoryltransferases by divalent cations.	J. F. Morrison. W. J. O'Sullivan.	Australian National University.
		Studies on the in-vitro enzymic phosphorylation of creatine.	J. F. Morrison.	
		The chemical synthesis of *N*-phosphorylated mono- and di-substituted guanidino compounds.	D. I. Magrath. I. M. Beatty.	
		The composition of the nucleic acids in the earthworm.	D. I. Magrath.	
		The isolation, purification, properties and mechanism of action of thymidylate synthetase.	R. L. Blakley.	
		Studies on the purification, properties and mechanism of action of dihydrofolic acid reductase and its inhibition by aminopterin.	R. L. Blakley.	
		Isolation, purification and properties of methylene tetrahydrofolic acid reductase.	R. L. Blakley. B. V. Rama Sastri.	
		Enzymic formation of aminoacetone and its role in metabolism.	M. L. Green. W. H. Elliott.	Rockefeller Foundation.
		Quantitative and qualitative analysis of aminoacyl hydroxamates for investigations on amino-acid activation.	W. H. Elliott.	Australian National University.
		Isolation of amino-acid activating enzymes.	W. H. Elliott. S. Sugai.	
		Protein synthesis: bacterial α-amylase formation.	W. H. Elliott.	
John Curtin School of Medical Research, Institute for Advanced Studies, Australian National University, Canberra.	Medical Chemistry.	The addition reactions of 2-hydroxypteridine.	A. Albert.	
		The reduction of pteridines.	A. Albert. S. Matsuura.	
		The ionization of mercapto-compounds.	A. Albert. G. B. Barlin.	
		The migrigation of methyl groups in pyrimidines.	D. J. Brown.	
		The methylation of aminopyrimidines and aminopteridines.	D. J. Brown. N. Jacobsen.	
		The hydrogenation of pyrimidines.	D. J. Brown. R. F. Evans.	
		The oxidation-reduction potentials of copper complexes.	D. D. Perrin. C. Hawkins.	
		Kinetics of the addition of water to heterocycles.	D. D. Perrin. Y. Inoue.	
		Raman, ultra-violet and infra-red spectroscopy of heterocyclic amines.	E. Spinner.	
		The electronic structure of hydroxypyridines.	E. Spinner. J. B. White.	
		Covalent hydration of the quinazoline nucleus.	W. L. F. Armarego.	
		Kinetics of chloropurines.	G. B. Barlin.	
		Microanalytical determination of halogens in the presence of one another.	Joyce E. Fildes.	
	Experimental Pathology.	The composition of the individual lipoproteins in different types of experimental lipæmia.	F. C. Courtice. D. G. Garlick.	
		The mechanism of lipoprotein exchange between plasma and tissues.	F. C. Courtice. D. G. Garlick.	
		The exchange of proteins between plasma and lymph in the liver.	F. C. Courtice. G. Wooliey.	
		The mechanisms concerned in the deposition of lipid in the arterial wall in atherosclerosis.	F. C. Courtice. A. Schmidt.	
		The metabolism of triglycerides and free fatty acids by the isolated perfused liver.	Bede Morris.	
		The digestion and absorption of long-chain fatty acids in the ruminant animal.	Bede Morris. T. J. Heath.	
		Studies on the competitive metabolism of fats and carbohydrates.	Bede Morris. M. W. Simpson-Morgan.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
John Curtin School of Medical Research, Institute for Advanced Studies, Australian National University, Canberra.	Experimental Pathology.	The oxidation of long-chain fatty acids by the perfused heart.	Bede Morris. M. W. Simpson-Morgan.	Australian National University.
		The role of the lymphatic system in the resolution of milk secretions.	A. K. Lascelles.	
		The metabolism of the ethionine-induced fatty liver.	M. A. Mishkel.	
		Mechanisms of innate and acquired resistance to bacterial and viral infection.	G. B. Mackaness.	
		Responses of cells to chemotactic influences.	S. V. Boyden.	
		Comparative physiology of phagocytosis.	S. V. Boyden. R. B. Vaughan.	
		Mechanisms of bacterial allergy and homograft reactions.	S. V. Boyden. D. S. Nelson.	
John Curtin School of Medical Research, Australian National University.	Physiology.	Investigations on the nature of presynaptic inhibition.	J. C. Eccles. Rosamond M. Eccles. W. Kozak. F. Magni.	Australian National University. Rockefeller Foundation.
		Physiological studies on the cells of origin of the spino-cerebellar tracts.	W. D. Willis. J. C. Eccles. J. I. Hubbard. F. Magni.	
		Central inhibitory pathways.	E. O. Oscarsson. T. Araki. J. C. Eccles. M. Ito.	
		The investigation of the actions of amino acids and other neuropharmacologically active substances on nerve cells.	D. R. Curtis. J. W. Phillis. J. C. Watkins.	Australian National University.
		Transmitter release at the mammalian neuromuscular junction.	J. I. Hubbard.	
		The ionic mechanisms involved in the operation of inhibitory synapses.	T. Araki. M. Ito. E. O. Oscarsson.	
		Fluid, electrolyte and endocrine interactions in mammals, including man, exposed to hot environments.	W. V. Macfarlane. R. J. H. Morris. Rosemary Kinne. Beth Howard.	Australian National University. Rural Credits Development Fund. Wool Research Fund.
		Investigations on the secretions from the adrenal cortex.	I. R. McDonald.	Australian National University.
		Effect of use and disuse of the simplest reflex pathways.	W. Kozak. R. A. Westerman.	
	Microbiology.[1]	Genetics of vaccinia virus.	F. Fenner. G. M. Woodroofe. R. M. Greenland.	Australian National University. U.S. Public Health Service.
		Radiobiological studies on vaccinia virus.	P. Abel. F. Fenner.	Australian National University.
		Epidemiology of myxomatosis in Australia.	I. D. Marshall.	Wool Research Fund.
		Epidemiology of arthropod-borne virus infections.	I. D. Marshall.	Australian National University. World Health Organization.
		Pathogenesis of viral infections.	C. A. Mims. J. Roberts.	Australian National University.
		Pathogenesis of lymphocytic choriomeningitis.	F. Lehmann-Grube.	
		Neutralization of influenza virus.	S. Fazekas de St. Groth. R. Webster.	
		Biology of the immune response.	F. Warburton. R. Webster. S. Fazekas de St. Groth.	
		Effects of inhibitors on vaccinia virus multiplication in tissue culture.	H. J. F. Cairns. C. I. Davern. K. Easterbrook.	Australian National University. Wellcome Trust.
		Structure of influenza virus.	G. Laver.	Australian National University.
		Structure of antibodies.	R. Weir. S. Fazekas de St. Groth.	
		Growth of herpes virus in isolated nuclei.	D. Lowther.	
		Biochemistry of vaccinia virus infections.	W. K. Joklik. V. Ackerman.	
		Chemical structure of biologically active mucoproteins.	A. Gottschalk. W. Murphy.	Australian National University. National Health and Medical Research Council.
	Biological Inorganic Chemistry.	Metal complexes as anti-bacterial agents.	F. P. Dwyer.	Australian National University.
		Substitution reactions in cobalt complexes containing multidentate ligands.	A. M. Sargeson. G. Searle.	
		Stereospecificity in metal complexes.	T. MacDermott. F. P. Dwyer.	
		Mechanisms of substitution reactions in metal complexes.	B. Bosnich. F. P. Dwyer.	
		Redox potentials of osmium complexes.	D. Buckingham. F. P. Dwyer.	
	Physical Biochemistry.	Properties of systems related to connective tissue.	A. M. Sargeson. A. G. Ogston. B. N. Preston. M. Davies.	
		Physico-chemical properties of proteins: denaturation.	H. A. McKenzie. J. Armstrong.	
		Properties of milk proteins.	H. A. McKenzie. Laurel Atkinson.	Australian National University. C.S.I.R.O.
Univ. Sydney.	Histology and Embryology.	Comparative histology of mammalian alimentary and genital systems.	E. W. van Lennep.	Grants made available for 1961 on the recommendation of the Medical Research Committee and the Cancer Research Committee.
		Comparative histology of molluscs.	G. E. Sullivan.	
		Functional studies on mammalian epididymis.	K. W. Cleland.	
		Cytochemical studies on cells of epididymal duct.	K. W. Cleland.	
	Physiology.	Neurophysiology of vision.	P. O. Bishop. G. J. Vakkur.	

[1] General support from Rockefeller Foundation.

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Univ. Sydney.	Physiology.	Effect of hypophysectomy on aging process in the rat.	A. V. Everitt.	Grants made available for 1961 on the recommendation of the Medical Research Committee and the Cancer Research Committee.
	Biochemistry.	(1) Cellular function, especially active transport.	W. J. Hensley.	
		(2) Fatty acid desaturation.	G. M. Kellerman.	
	Pharmacology.	Cardiotonic factor in spleen.	R. H. Thorp.	
		Electrophysiology of cardiac muscle.	L. B. Cobbin.	
	Pathology.	Renal tubulonecrosis and its relation to anuria.	E. A. Johnson.	
		Ætiology and pathogenesis of pulmonary alveolar wall fibrosis.	E. S. Finckh.	
		Morphogenesis of elastic tissue.	K. Viner Smith.	
		Ætiology of atherosclerosis.	R. W. Cox.	
		Normal osteogenesis, experimental osteosarcoma, and normal and regenerating mucosa of the mouth.	W. E. Stehbens.	
	Bacteriology.	Metabolism of virus-infected cell.	D. A. Cameron.	
		(1) Microorganism in mixed culture.	P. M. de Burgh.	
		(2) Development of instruments for study of microbial environments.	G. Charlton.	
		Mechanism of virulence in *Leptospira*.	S. Faine.	
	Medicine.	Respiratory research.	C. R. B. Blackburn.	
			J. R. Read.	
			K. T. Fowler.	
			D. F. J. Halmagyi.	
	Surgery.	Healing of gastric epithelium.	G. W. Milton.	
		Biochemical assessment of peripheral ischæmia.	J. P. Halliday.	
	Obstetrics.	Fine structure of human somatic chromosomes.	B. T. Mayes.	
		Œstrogen and pregnanediol studies in human carcinogenesis in human cervix.	B. L. Reid.	
	Psychiatry.	Follow-up study of neurotic illnesses.	D. C. Maddison.	
			J. S. Shand.	
			M. Grutzner.	
	Zoology.	Recombination of isolated cells of sponges and coelenterates after treatment by various agents.	J. R. Simons.	
	Veterinary Pathology and Bacteriology.	Epithelioma of skin of sheep.	H. R. Carne.	
			L. C. Lloyd.	
	Veterinary Physiology.	Methods of hormonal metabolite estimation in body fluids, and metabolism of steroids.	C. W. Emmens.	
	Agriculture.	Development of a phase-fluorescence microscope.	Y. T. Tchan.	
	Botany and Biochemistry.	Electron microscope.	D. G Drummond.	
	Child Health.	Accident prevention.	F. W. Clements.	
			J. Cullen.	
			P. E. Grave.	
		Rheumatic disease.	B. T. Dowd.	
			H. Walsh.	
			P. E. Grave.	
		Endemic goitre.	F. W. Clements.	
		Progress of premature babies.	H. Walsh.	
			F. W. Clements.	
			J. Cullen.	
			P. E. Grave.	
			Sir N. Gregg.	
			P. Davey.	
		Urinary tract infections.	J. D. McDonald.	
		Mental and physical status of hypothyroid children.	B. T. Dowd.	
			J. Cullen.	
		Register of malignant disease.	D. Cohen.	
		Development of equipment for cardio-pulmonary by-pass surgery.	D. Cohen.	
Univ. Melbourne.	Anatomy.	The mechanical properties of nerves.	S. Sunderland.	
			K. C. Bradley.	
		The connective tissue of nerves.	S. Sunderland.	
		The neural and vascular relations of the pineal.	S. Sunderland.	
			G. C. Kenny.	
		Physical anthropology of the Australian aboriginal.	L. J. Ray.	
		History of anatomy.	K. F. Russell.	
		Cytochemistry of neural induction.	J. O. Lavarack.	
		Growth of normal children.	A. F. Roche.	
		Growth of mongoloid children.	A. F. Roche.	
		Growth of children with dwarfism.	A. F. Roche.	
		Fine structure of neuromuscular mechanisms.	N. C. R. Merrillees.	
		The nervus conarii of the pineal.	G. C. Kenny.	
		The hippocampus: neurophysiological and neuropharmacological studies.	C. W. Dunlop.	
	Bacteriology.	Studies in hospital cross infection.	S. D. Rubbo.	
			B. Stratford.	
			S. Dixson.	
		The influence of surface-active agents on tuberculous immunity.	D. F. Gray.	
			M. O'Hara.	
			R. Terry.	
		The importance of humoral aspects of the immune response in tuberculosis.	D. F. Gray.	
			M. O'Hara.	
			R. Terry.	
		The survey of brucellosis and of leptospirosis in rural areas of Victoria.	College of General Practitioners.	
			Health Department of Victoria.	
			Public Health Laboratory, Univ. Melbourne.	
		Studies in brucellosis.	M. Morton.	
			M. M. Wilson.	
		Mode of action of isoniazid.	J. Youatt.	
		Studies on the virus of rabbit skin papilloma.	D. White.	
		The effect of complex chelate agents on viral multiplication.	D. White.	
			A. W. Harris	
			A. Shulman. (Dept. of Physiology.)	
		The possible role of viruses in mesenteric adenitis.	D. White.	
			E. A. Allcock. (Dept. of Surgery.)	
		The early stages of viral infection.	D. White.	
			H. M. Oliphant.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Univ. Melbourne.	Bacteriology.	Genetic transformation in *Pseudomonas æruginosa*.	B. W. Holloway. J. Fenton. J. Legge. (Dept. of Biochemistry.)	
		The influence of radiation and radiomimetic chemicals on genetic transduction in *Pseudomonas æruginosa*.	B. W. Holloway. L. Hodgins. M. Monk.	
		The relationship of prophage to the bacterial chromosome.	B. W. Holloway.	
		Studies on bacteriophages of cheese starter cultures.	B. W. Holloway. K. D. Nicholl.	
		Citric acid production from refined sugar.	N. Millis. H. Trumpy.	
		Citric acid production from molasses.	N. Millis. R. Read.	
		Epidemiology and ecology of coliforms.	R. Mushin. F. Ashburner.	
		Pathogenicity of coliforms.	R. Mushin. F. Ashburner.	
		A study of "dwarf" staphylococci and growth inhibition by complex chelate agents.	B. Lilienthal. M. Buckmaster.	
		Phosphates and prevention of dental caries.	B. Lilienthal.	
		An epidemiological study of periodontal disease in man.	B. Lilienthal. The Periodontal Study Group.	
		Bacteroides malaninogenicum and its relation to periodontal disease.	B. Lilienthal. S. Bell.	
		Studies on the biosynthesis of aromatic compounds by microorganisms.	F. Gibson. M. I. Gibson.	
	Biochemistry.	Endocrine biochemistry: naturally occurring goitrogens.	P. Morgan. V. M. Trikojus. Mary T. McQuillan. Pamela E. E. Todd.	
		Factors controlling biochemical adaptation to exercise.	W. A. Rawlinson.	
		Physical biochemistry of hæm pigments.	W. A. Rawlinson. R. W. Henderson.	
		Biochemistry of nucleic acids and nucleases.	J. W. Legge.	
		Transamination of amino acids, metabolism of butyrate and glucose in the ruminant.	F. J. R. Hird.	
		Chemistry and biochemistry of wheat proteins.	F. J. R. Hird. C. A. M. Mauritzen.	
		Nutritional research, with particular reference to nutrition and growth in young children.	A. J. Cahn.	
		The carbohydrases of bacteria.	B. A. Stone.	
		Biochemistry of cellular transport systems and influence of hormones thereon.	L. R. Finch.	
		Coenzyme distribution in cells.	L. M. Birt.	
		Phospholipid chemistry and biochemistry.	F. D. Collins.	
		Proteolytic and other enzymes in *Streptococcus lactis* in reference to cheese production.	G. R. Jago.	
	School of Dental Medicine and Surgery	A study of dwarf staphylococci.	M. Buckmaster. B. Lilienthal.	
		The effect of FeMe$_4$phen, *in vivo* on cell numbers, acid production and aerobic metabolism of the oral flora.	M. Buckmaster. Sandra E. Bell.	
		Phosphates and their protective role in dental caries.	B. Lilienthal.	
		The ætiology of dental caries, the physiology of human teeth.	B. Lilienthal. P. Pincus.	
		Transverse crack lines in anterior teeth.	P. R. N. Sutton.	
		Dental caries and mental stress.	P. R. N. Sutton.	
		A radiographic and histological study (post-mortem) of the conditions of repair in dental extraction wounds.	G. Dalitz.	
		A study of mandibular movement.	R. W. Shepherd.	
		A clinical study of dysfunctions of the temporomandibular joint.	H. F. Atkinson. R. W. Shepherd.	
		Methods of producing sections of hard calcified tissues for histological purposes.	H. F. Atkinson. J. K. Harcourt.	
		A microradiographic study of the structure of human enamel and dentine.	J. K. Harcourt.	
		An investigation into the causes of the increase in vertical dimension which occurs during the fabrication of full dentures.	A. A. Grant.	
		A study of bone and associated facial changes after normal dental procedures.	H. I. Gill.	
		A study of the porosity and volume changes occurring in methyl methacrylate on polymerization, with particular reference to their clinical application.	C. G. Dennis.	
		A clinical investigation into the prosthetic treatment of the cleft palate patient.	C. G. Dennis.	
		A clinical investigation into the resorption of the alveolar process after tooth removal and alveolectomy.	K. Johnson.	
		An investigation into the tissue tolerance of various materials which may be used in dental implant techniques.	N. W. Johnson.	
		Antibiotics in endodontia.	J. Reich. Asja Stragis.	
		Biochemical changes in dental pulp tissue following injury.	J. Reich.	
		Special investigations of periodontal lesions.	J. Reich.	
		Design of dental equipment with special reference to their uses in dental schools.	J. Reich. A. S. Malcolm.	
		Periodontal status in diabetics.	M. J. A. Campbell.	
		Conservation of deciduous molars.	J. E. L. Jeffrey.	
Royal Melbourne Hospital.	Medicine.	(1) Studies on coronary disease.	R. R. H. Lovell.	
		(2) Studies on lipid metabolism.	M. A. Denborough.	
		(3) Mechanisms of high blood pressure and its relation to renal disease.	M. A. Denborough. A. E. Doyle. J. Dawborn.	
		(4) Histological changes in renal disease and their correlation with clinical and biochemical abnormalities.	K. Catt. Priscilla Kincaid-Smith.	
		(5) Studies on calcium and phosphorus metabolism.	R. A. Melick.	
		(6) Serological factors in rheumatic diseases, and the development of synovial tissue culrures.	J. R. E. Fraser. K. Catt.	
		(7) Studies of industrial lung disease.	B. Gandevia. B. Ritchie	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
St. Vincent's Hospital, Melbourne.	Medicine.	Metabolic defects in congenital and acquired hæmolytic anæmias.	P. B. Loder.	
		Studies on red cell production and destruction in leukæmia and allied disorders with radioactive iron and chromium.	G. C. de Gruchy.	
		Splenectomy in leukæmia and allied disorders.	G. C. de Gruchy.	
		Testosterone in the treatment of anæmia.	G. C. de Gruchy.	
		Felty's syndrome.	G. C. de Gruchy.	
			R. Langley.	
		Acid base abnormalities in acute and chronic renal disease.	J. Niall.	
		Investigation of functional patterns in oliguric states.	J. Niall.	
		Study of acid excretion in gout.	R. K. Pak Poy.	
		Investigation of renal tubular disorders.	R. K. Pak Poy.	
		Pulmonary function studies in chronic bronchitis and emphysema.	I. McDonald.	
		Serum ornithine transcarbamylase in liver disease.	I. McDonald.	
		Senile and post-menopausal osteoporosis.	D. Wallace.	
Univ. Melbourne.	Obstetrics and Gynæcology.	Accidental hæmorrhage—effects on the fœtus.	J. G. White.	
			L. Townsend.	
		Rhesus-iso-immunization.	L. Townsend.	
			J. G. Shelton.	
			E. V. Mackay.	
			Vera I. Krieger.	
		Chronic renal disease and pregnancy.	E. V. Mackay.	
			Margery A. Smith.	
		Adrenal cortical function in obstetrics and gynæcology.	E. V. Mackay.	
			Margery A. Smith.	
		Study of liquor amnii in Rhesus iso-immunization.	E. V. Mackay.	
		Clinical evaluation of bioflavinoid complex in Rh immunization.	J. G. Shelton.	
		The pitocin sensitivity test and vaginal cytology smear in relation to induction of labour.	E. V. Mackay.	
		Nutritional aspects of pregnancy.	G. Jacobs.	
			J. H. Bolton.	
			Lucy F. Kerley.	
		Plasma and urinary amino acids in pregnancy.	F. M. C. Forster.	
		Human albumin in exchange transfusion.	Lucy F. Kerley.	
			W. H. Kitchen.	
			Vera I. Krieger.	
			Margery A. Smith.	
		Blood volume in erythroblastosis fœtalis.	W. H. Kitchen.	
			Vera I. Krieger.	
			Margery A. Smith.	
		Survey of congenital malformations.	D. B. Pitt.	
		Congenital malformations and maternal rubella.	D. B. Pitt.	
		Hyaline membrane disease.	T. G. Maddison.	
		Pelvic tuberculosis in the female.	S. L. Townsend.	
		Cellular index of sensitivity to ionizing radiation.	W. Chanen.	
	Pathology.	Hormonal effects on bone.	E. Storey.	
		Carcinoma of lung.	J. T. Roberts.	
		Action of aminoacetonitriles on connective tissues.	Kathryn Ham.	
		Action of carcinogens on liver.	G. S. Christie.	
			Margot Bailie.	
			R. N. Le Page.	
		Canine tumours.	Anne Jabara.	
		Chemical carcinogenesis.	P. E. Hughes.	
			D. Bremner.	
		Histochemical studies.	D. W. Menzies.	
		Electronmicroscopy (various organs).	N. Xeros.	
			S. Weiner.	
		Experimental congenital abnormalities.	C. R. Green.	
			Bernice Stratford.	
		Experimental injury of tissue (ear-chamber).	I. K. Buckley.	
		Experimental encephalomyelitis.	R. McD. Anderson.	
			G. Szego.	
		Microdissection of kidney.	Thelma Baxter.	
		Studies on alcohol in tissues.	N. E. W. McCallum.	
			J. G. Scroggie.	
			R. C. Bayly.	
	Pharmacology.	Psychopharmacology.	S. Gershon.	
			W. Lang.	
		Ionic accumulation in muscle.	Shirley E. Simon.	
			Margaret Filschie.	
			David Satchell.	
		T.H.A. Carcinostatic amino acid.	M. E. Whisson.	
		Metabolism and mechanism of action of T.H.A.	P. N. Kaul.	
		Study of serotonin amiphenazole and antihistamine sedation.	D. W. Bruce.	
		Pharmacology of tetrahydroaminacrin (T.H.A.).	Laura Herman.	
		Mechanism of action of daptazole.	Teh Chai Woo.	
		A study of some minor metabolites in human urine.	P. J. Morgan.	
	Physiology.	(1) Electrophysiology of sheep parotid gland.	D. A. Coats.	
		(*a*) Measurements of membrane potential during rest and activity will be correlated with changes in the ionic pattern of blood and saliva and with changes in the membrane resistance of single gland cells.	Mollie E. Holman.	
			I. D. Pugsley.	
			R. D. Wright.	
		(*b*) Membrane potential measurements will be used to investigate the pattern of innervation of the parotid gland and the mechanism of transmission from autonomic nerve to gland cells.		
		(2) Transmission from autonomic nerve to smooth muscle.	Mollie E. Holman.	
		(*a*) Transmission from sympathetic nerve to smooth muscle. Many of the problems associated with transmission will be further investigated, using guinea-pig hypogastric nerve-vas deferens preparation.	G. Burnstock. (Dept. of Zoology.)	
		(i) The mechanism of release of transmitter substance.		
		(ii) The mode of action of the transmitter.		
		(iii) The rate of destruction of transmitter.		
		(iv) Distribution of nerve endings.		
		(v) The relation between electrical activity and tension.		

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Univ. Melbourne.	Physiology.	(*b*) The interaction of excitation and inhibition at smooth muscle junctions. Work on the problem of transmission from nerve to smooth muscle will be extended to further preparations where inhibitory as well as excitatory effects can be produced by nerve stimulation.	Mollie E. Holman. G. Burnstock. (Dept. of Zoology.)	
		(3) The passive electrical properties of smooth muscle. Methods involving double-barralled micro-electrodes and two single electrodes have been developed and used successfully on skeletal muscle. These methods will now be applied to smooth muscle cells.	I. D. Pugsley.	
		(4) Comparative studies of mammalian smooth muscle. This project will be extended to include the recording of trans-membrane potentials from muscles showing inherent rhythmicity. Studies of plateau-type action potentials in smooth muscle will be continued.	Mollie E. Holman.	
		(1) Electromyographic studies of muscle function. It is proposed to continue with the technique of using a tripolar electrode system for accurate localization of active regions in human muscle, and to apply it to the study of muscular disorders. It is also proposed to investigate the response of human muscle systems to transient changes in load.	D. J. Dewhurst. J. Filshie.	
		(2) Membrane potential studies. It is proposed to extend the previously developed theory of concentration polarization at charged membranes to include the effects of endosmotic movement of the solvent, and to relate this work to threshold phenomena in stimulated tissue.	D. J. Dewhurst.	
		(3) Development of instrumentation. It is proposed to continue the development of instrumentation for biological measurements being undertaken by other members of the department, in cases where commercial equipment does not exist.	D. J. Dewhurst.	
		(1) Development of spectrophotometric method for assay of adenosine inactivating enzyme.	E. R. Trethewie.	
		(2) Electrocardiographic studies. (*a*) Continuation of analysis of congenital heart E.C.G.'s and their correlation with clinical diagnosis and right ventricular pressure, using A.B.C. tracings. (*b*) Continuation of analysis of cardiac infarction E.C.G.'s and their correlation with left ventricular pressure, using A.B.C. tracings.	E. R. Trethewie.	
		(3) Investigation of role of histamine as C.N.S. transmitter.	E. R. Trethewie.	
		(1) The action of complex inorganic cations on systems. (*a*) The effect of complex inorganic cations on *Staphylococcus pyogenes* (var. *aureus*). (*b*) The effect of complex inorganic cations on the yeast *Saccharomyces cerevisæ* var. *ellipsoideus*. (*c*) The effect of complex inorganic cations on pathogenic fungi. (*d*) The treatment of staphylococcal mastitis in cows. (*e*) Topical application of selected complex metal compounds. (*f*) Studies on the oral administration of selected complex metal compounds in mice. (*g*) The hyperglycæmic effect of complex metal compounds and related substances in rats.	A. Shulman. (Now overseas.) F. P. Dwyer (Dept. Inorganic Chem., Aust. Nat. Univ.). R. D. Wright. K. H. Shankly. J. F. Nelson. G. Laycock (overseas). Mildred Butler (Roy. Women's Hosp.). A. W. Harris, R. E. Wright (Bacteriology Dept.).	
		(2) The use of complex metal compounds—clinical practice. This work is being carried out in association with the staffs of the Royal Women's Hospital, the Royal Melbourne Hospital and the Eye and Ear Hospital, Melbourne.	M. Morton. D. O. White (Dept. of Microbiology).	
		(1) Experiments to determine the role of the central nervous system in the control of aldosterone secretion. (*a*) Continuation of neural ablation experiments (acute and survival preparations) on Na-replete and Na-depleted animals. (*b*) Further investigation of neural influences on adrenal secretion, particularly of aldosterone, with special reference to stereotaxic procedures and chronic implantation of electrodes. (*c*) Further study of the effects of local alteration of the ionic environment of the adrenal, the effect of altering systemic arterial pressure by carotid sinus stimulation, and the effect of constriction of the thoracic inferior vena cava.	R. D. Wright. D. A. Denton. J. R. Goding. J. R. Goding. J. A. Munro. J. Blair-West. J. Coghlan. S. Beilharz.	
		(2) Development of the double isotope method of steroid assay. (*a*) Further development of the double isotope method of steroid assay, and in particular the use of randomly labelled aldosterone and ring-labelled aldosterone for analysis of adrenal vein blood collected under the experimental conditions outlined above. (*b*) Development of methods for derivation of adrenal steroid secretion rate.		
		(3) Selective appetite for Na salts and behaviour studies in sheep. (*a*) Further development of methods involving the use of intravenous infusion of Na^+ before providing access to various solutions containing electrolytes. (*b*) Development of methods for derivation of adrenal steroid secretion. (*c*) Continuation of experiments in collaboration with Graham Arnold, of C.S.I.R.O. Plant Industry Division, Canberra, on the nerves supplying the tongue and mouth and effect of nerve sections on grazing behaviour.		

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Univ. Melbourne.	Physiology.	(1) A study of the mechanism of carcinogenesis. Using the continuous direct microinjection technique it is proposed to apply chemicals directly and continuously to a tissue under conditions which are known to produce a malignancy of that tissue in a high percentage of cases. From the results it is hoped to make tentative inferences concerning certain metabolic pathways or events which may or may not be involved in the carcinogenic process. (2) Induced enzyme changes in mammalian systems. Investigation of the more general biological activity of substances used in project (1) when administered in the same manner to normal tissues. (3) Genetic transformation in mammalian cells. An attempt to demonstrate genetic transformation in mammalian cells using D.N.A. preparations administered by the microinjector technique directly and locally to tissue.	S. Rose. T. R. Bradley.	
		(1) Intestinal absorption. The comparison of the absorptive activities of different parts of the intestine. (1) An investigation of the Ehrlich-Hanske-Lettre mouse ascites tumour. (i) The nature of the tumour being used. (ii) Ionic disturbances in the host. (iii) Experiments involving transference of the tumour to different animal types. At present the effect of a tumour on the host is being studied, with particular attention to hæmolysis, and also the effect on pregnancy and reproduction.	W. T. Agar. M. A. Ressom. E. M. Trautner. D. A. Coats.	
Alfred Hospital, Melbourne.	Surgery.	The absorption of vitamin B_{12} in the presence of a blind loop.	M. R. Ewing David Cowling (Royal Melb. Hosp.).	
		Continuous monitoring of hydrogen ion concentration of the stomach and small intestine in man.	E. A. Allcock.	
		Pressure changes in the small intestine after operations on the gastro-intestinal tract.	E. A. Allcock.	
		A study of the mechanism of thrombosis in vessel grafting in the dog.	Ian Russell.	
		A study of the innervation of the common bile duct in the dog.	G. Berci.	
		The importance of infection as a cause of mortality and morbidity in renal hæmodialysis.	E. Kidd.	
		The isolated perfusion of tumour-bearing areas with cancer chemotherapeutic agents.	K. Cox.	
		Television as an aid in diagnosis.	G. Berci.	
		Enquiry into medico-social aspects of accidents.	I. McNicol Smith. B. Letheran.	
		Artificial kidney. Urinary calculi in the sheep.	J. Nayman.	
Univ. Adelaide.	Anatomy and Histology.	Physical anthropology of Australian aborigines—Expedition to Booroolooola, Arnhem Land.	A. Abbie and Staff.	Medical Research Committee.
		Experimental embryology—mainly concerned with changes in serum constituents, especially endocrines.	J. H. van Deth.	
	Biochemistry.	Absorption of ^{41}Ca and ^{22}Na in chicks—influence of sterols.	E. S. Holdsworth. J. Sallis.	
		Enzyme kinetics.	E. S. Holdsworth. A. B. Roy. E. Neville.	
	Child Health.	Further studies of coronary blood flow and myocardial metabolism.	G. M. Maxwell.	
		Study of the synthetic penicillins BRL 152 and BRL 1241.	G. M. Maxwell and Staff.	
		Serum and urine osmolarity in disease states of children, and in the experimental animal.	G. M. Maxwell and Staff.	
	Dentistry.	An investigation into the formation of gingival sulcus in animals and humans.	J. A. Cran.	
		An investigation into the incidence of periodontal disease.	P. C. Reade.	
		Cinema analysis of jaw movements during mastication.	M. J. Barrett.	
		Histopathology of dental caries and secondary dentine formation using very thin hard sections.	J. A. Cran.	
		Relationship between dental caries incidence in children and their general growth and development.	B. G. Radden.	
		An investigation of mast cells in human and experimental oral lesions.	A. M. Horsnell.	
		Anatomy of the temporo-mandibular joints of mammals.	B. G. Radden.	
	Medicine.	Study of chromosome number in leukæmia.	T. Brown.	
		Study of thyroid function.	H. N. Robson. M. A. Kinlough.	
		Investigation into mechanism of anæmia.	B. S. Hetzel. M. Wellby. B. Good.	
		Student vacation project—non-specific action of B_{12} and folic acid.	H. Lander. H. N. Robson.	
	Microbiology.	The study by tissue culture methods of phagocytic cells in relation to respiratory infections.	D. Rowley. E. R. Pavillard.	
	Obstetrics and Gynæcology.	Transmission of sodium across the placenta in normal and abnormal pregnancy measured by radioactive tracers Na_{24}.	L. W. Cox.	
	Obstetrics and Dentistry jointly.	Survey of dental health in pregnancy and its relationship to infant development.	L. W. Cox. A. M. Horsnell. M. Harkin. J. K. Burden. L. J. Packer.	
	Pathology.	Studies on *Cryptococcus neoformans*.	J. S. Robertson. K. D. Murray.	
		Traffic injury study.	P. R. Hodge.	
	Physics.	The structure of biological molecules—X-ray diffraction studies of insulin fibrin and hyaluronic acid.	S. G. Tomlin.	
	Physiology.	Neurophysiology, with particular relation to pain.	D. I. B. Kerr. P. Dellow.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Univ. Adelaide.	Physiology.	Action of adrenaline and adrenaline antagonists on muscle metabolism in man.	R. F. Whelan.	Medical Research Committee.
		Pharmacology of Australian plants.	I. S. de la Lande.	
			I. S. de la Lande and Demonstrator.	
		Metabolism of lipids by macrophages using radioactive isotopes.	A. J. Day.	
		Innervation of skin and muscle blood vessels in man.	R. F. Whelan.	
			P. Dellow.	
		Uptake of lipid by macrophages and its role in atherosclerosis.	A. J. Day.	
			P. R. S. Gouldhurst.	
		Metabolism of acetylcholine in smooth muscle.	I. S. de la Lande.	
			R. B. Porter.	
	Surgery.	An examination of ion transport of biological membranes.	L. J. Opit.	
	Biochemistry.	Investigation into the mode of action of vitamin D.	E. S. Holdsworth.	National Health and Medical Research Council.
			J. D. Sallis.	
	Medicine.	Investigations of the chemical nature of the circulating thyroid hormone in health and disease.	B. S. Hetzel.	
			M. L. Wellby.	
		Examination of intracellular effects of salicylate.	B. S. Hetzel.	
			J. S. Charnock.	
		Investigations on the nature and control of thyroid secretion with the aid of T.S.H. assay.	B. S. Hetzel.	
			B. F. Good.	
	Physiology and Pharmacology.	Study on the mechanism of action of reserpine and other vasoactive drugs on the peripheral blood vessels in man.	R. F. Whelan.	
			S. L. Skinner.	
	Microbiology.	Mouse macrophages when studied *in vitro* will rapidly kill many Gram-negative organisms. A study of the above subject at the one macrophage-one bacterium level. This bactericidal activity is also followed at the sub-cellular level by working with disrupted macrophages.	D. Rowley.	
			E. Looke.	
		Salmonellas in Australia.	N. Atkinson.	
	Physics Section—Anti-Cancer Campaign Committee.	X-ray dosimetry.	B. W. Worthley.	Anti-Cancer Campaign Committee.
			M. J. Tooze.	
			M. H. Parker.	
			J. Hayward.	
		Environmental radioactivity and body burden.	B. W. Worthley.	
			M. J. Tooze.	
			M. H. Parker.	
			J. Hayward.	
	Organic Chemistry.	Mode of formation of carcinogens and chemotherapy of cancer.	G. M. Badger.	Anti-Cancer Campaign Committee.
			J. W. Clark-Lewis.	
			G. E. Lewis.	Damon Runyon Memorial Fund for Cancer Research.
			R. W. L. Kimber.	
			R. P. Singh.	
			J. Novotny.	The Jane Coffin Childs Memorial Fund for Medical Research.
			J. M. Sasse.	
			R. A. Jones.	
	Department of Agricultural Chemistry.	Enzymic studies of tumour tissues and particularly the metabolism of pyridine nucleotides in relation to cell growth.	R. K. Morton.	Anti-Cancer Campaign Committee.
			M. R. Atkinson.	
			P. Caiger.	McGregor Reid Estate.
			R. Nayor.	Australian Institute of Nuclear Science and Engineering.
			J. Jackson.	
	Microbiology.	The chemical structure of some Gram-negative bacterial cell walls.	D. Rowley.	University Research Grant.
			C. Jenkin.	
		The intracellular bactericidal mechanisms of phagocytic cells.	D. Rowley.	
			C. Jenkin.	
		A study of the factors controlling virulence in *S. typhimurium* using the methods of bacterial genetics.	D. Rowley.	
			C. Jenkin.	
		The kinetics of phagocytosis of bacteria by macrophages.	D. Rowley.	
			C. Jenkin.	
	Physiology and Pharmacology.	Cardio-vascular and respiratory effects of sympathomimetic amines in man.	R. F. Whelan.	
		Thalamic afferent projections.	D. I. B. Kerr.	
		Central control of afferents.	D. I. B. Kerr.	
			P. Dellow.	
		Vascular reflexes studied by diameter recording.	F. Lippay.	
		Actions of morphine and morphine antagonists on acetylcholine synthesis in brain.	I. S. de la Lande.	
		Influence of drugs on certain aspects of the excitability of the peripheral nerve.	J. McNally.	
		Lipid metabolism and atherosclerosis.	A. J. Day.	
		Metabolism of fatty acid esters of cholesterol by reticulo-endothelial cells.	A. J. Day.	
			P. Gouldhurst.	
	Medicine and Genetics.	Research into Kuru.	H. N. Robson.	Rockefeller Foundation.
			J. H. Bennett.	
	Microbiology.	Chemical products of bacteria.	P. Reeves.	The Wellcome Trust.
		Natural immunity to infectious diseases...	D. Rowley.	The Nuffield Foundation.
		The role of opsonins in native susceptibility to infections.	D. Rowley.	Department of Health, Education and Welfare, U.S.A.
			C. R. Jenkin.	
	Obstetrics and Gynæcology.	The effect of hormone preparations in the treatment of various conditions.	L. W. Cox.	G. D. Searle and Co. Ltd., England.
			E. Puddy.	
	Child Health.	Coronary hæmodynamics and myocardial oxygen and carbon dioxide metabolism in the intact animal.	G. M. Maxwell.	The Life Insurance Medical Research Fund of Australia and New Zealand.
	Physiology and Pharmacology.	The effects of reserpine and other autonomic agents on the levels of circulating vasoactive hormones.	R. F. Whelan.	
	Physiology — Aero Medical Research Laboratory.	Aero medical research.	D. H. Le Messurier.	Department of Air and Department of Civil Aviation.
Univ. Queensland.	Medicine.	(i) Continued investigations into the nature of the adrenal response to its trophic hormone.	A. W. Steinbeck.	
		(ii) Further investigation of the adrenal response in Cushing's syndrome, hirsutism plus obesity and menstrual disorders and some inter-sex conditions.		
		(iii) Study of corticotrophin and steroid preparations used in treatment.		
		(iv) Clinical, laboratory and genetic studies of congenital adrenal hyperplasia, gonadal dysgenesis and goitrous cretinism.		

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Univ. Queensland.	Medicine.	(i) Investigation of human pituitary gonadotrophin. (ii) The renal clearance of phosphate in patients with nephrolithiasis.	H. M. Lloyd. H. M. Lloyd. J. B. Cope. A. W. Steinbeck.	
		(i) Investigation into the hyperuricæmia of renal disease, especially lead nephropathy. (ii) Therapeutic trials of drugs—a hypnotic, three diuretic and three uricosuric drugs.	B. T. Emmerson.	
		(i) Initiation of basic histochemical studies of the amine oxidase content of the various nuclear groups of grey matter in rabbit brain. (ii) Study of the altered affinities of fresh (unfixed) myelin for alum hæmatoxylins after fixation by ethyl alcohol.	J. H. Tyrer.	
		(iii) A survey of the primary spino-cerebellar atrophies, their associated defects and a study of the mechanism of the foot-deformity in Friedreich's ataxia.	J. H. Tyrer. J. W. Sutherland.	
		(iv) (*a*) Study of the clinical features of multiple sclerosis. (*b*) Study of the clinical features of tuberous sclerosis.	J. M. Sutherland. M. J. Eadie. J. H. Tyrer.	
		Investigations of parasitic diseases transmittable to man with special reference to cestodes (tape-worms).	D. F. Sandars.	
		Preliminary studies begun in 1960 to attempt to determine the biological significance of any hormone content in atheromatous plaques in degenerated human aortas.	H. A. Copeman.	
Univ. Western Australia.	Anatomy.	(1) An investigation into the anatomical basis of cutaneous sensation.	D. C. Sinclair. E. F. Glasgow.	None.
		(2) A survey of the general features of the brain and spinal cord of the quokka.	W. F. C. Blumer.	University.
		(3) An investigation into teaching methods in topographical anatomy.	D. C. Sinclair.	None.
	Biochemistry.	Studies in the enzyme organization of tissue.	K. E. Mortimer.	M.S.R.G.
		Cysteinyl and tryptophanyl peptides in human serum albumin.	I. T. Oliver. B. Ketterer. D. Clark Walker.	
		Action of proteases on MSH activity of ACTH.	B. Ketterer.	
		New proteins in egg white.	B. Ketterer. R. Wise.	
		Studies on the mechanism of galactose toxicity.	I. T. Oliver.	
		Electrophoretic and ultracentrifugal analyses of serum with emphasis on macroglobulinæmia.	I. T. Oliver. H. J. Rubinstein.	
		Kangaroo insulin.	B. Ketterer.	
		Some aspects of zinc and copper toxicity.	I. Witham.	
	Child Health and Physiology.	Experimental work to determine the effect of acute water loss on the nervous system.	E. P. J. Silberstein.	Univ. Western Australia.
	Physiology.	Intestinal fat absorption.	W. J. Simmonds. S. Bennett.	N.H. & M.R.C. University Medical Research Grant.
		Intestinal motility and absorption of foodstuffs.	R. Morgan.	N.H. & M.R.C.
		Iron metabolism in marsupials.	I. Kaldor. E. Ezekiel.	N.H. & M.R.C. University Medical Research Grant.
		Iron storage and transport.	E. Morgan.	N.H. & M.R.C.
		Marsupial reproduction.	H. Tyndale-Biscoe.	University Medical Research Grant.
		Nerve conduction velocity.	R. Collin.	
	Pathology.	Tumour registry in the Territories of Papua and New Guinea.	R. E. J. ten Seldam, in conjunction with Leicester Atkinson (St. Vincent's Hospital, Sydney), Bruce Forbes (School of Tropical Medicine, Univ. Sydney), H. O. Lancaster (Univ. Sydney).	Anna Fuller Fund, New Haven, Connecticut, U.S.A.
		Megakaryocytic and trophoblast embolism.	R. Barter. R. Wheeler.	Univ. Western Australia
		Statistical research into breast cancer.	M. Walters.	
		Vitamin E deficiency.	B. Kakulas.	
Royal Perth Hospital.	Pathology.	Gastro-intestinal alterations in malabsorption.	J. Blackwell.	Royal Perth Hospital.
Univ. Western Australia.	Microbiology.	Ecology and epidemiology of Arbor viruses in Western Australia.	N. F. Stanley.	Univ. Western Australia N.H. & M.R.C.
		Studies on reoviruses and the hepatoencephalomyelitis virus.	N. F. Stanley.	Univ. Western Australia.
Univ. Western Australia and Department of Public Health.	Microbiology and Virology.	Epidemiological studies on enteroviruses.	N. F. Stanley.	Univ. Western Australia. N.H. & M.R.C.
		Isolation, propagation, antigenic structure and epidemiology of the agent of trachoma.	D. H. Perret. P. G. Surman.	Department of Public Health.
Royal Perth Hospital and Univ. Western Australia.	Microbiology.	Preservation of microorganisms and mammalian cells by freezing and drying.	D. I. Annear.	Univ. Western Australia. Royal Perth Hospital.
Royal Perth Hospital.	Microbiology.	Studies on the control and prevention of hospital cross-infection.	R. T. B. Green.	Royal Perth Hospital.
Univ. Western Australia.	Microbiology.	Fluorescent antibody study of virus antigen.	N. F. Stanley.	Univ. Western Australia.
		Studies on the nature of normal and disorganized cell growth and division.	C. J. Perret. J. W. May.	
		Genetic and immunological aspects of the formation and stability of bacterial penicillinase.	C. J. Perret. J. W. May.	
	Medicine.	Studies in acute and chronic liver disease.	E. G. Saint. R. A. Joske.	Adolph Basser Research Fellowship of The Royal Australasian College of Physicians.
		Studies on intestinal malabsorption.	R. A. Joske.	
		The epidemiology of atypical mycobacteria.	E. G. Saint. J. T. Smyth.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Univ. Western Australia and Royal Perth Hospital.	Surgery.	Arterial occlusive disease and its causation hæmodynamic principles.	C. W. D. Lewis.	University Medical Research Grants.
		The effects of surgical operations on thyroid secretion.	R. Paton.	
		Control of the stress reaction following major surgery.	J. G. Brockis.	
		The vascular supply of the colon in health and disease.	J. G. Brockis.	
			J. G. Brockis.	
Univ. Western Australia.	Obstetrics.	Investigation into the mechanism of the production of fœtal distress.	J. D. Martin.	Univ. Western Australia.
Royal Prince Alfred Hospital, Camperdown, N.S.W.	Clinical Research Unit.	Leukæmia—study of phospholipid metabolism and problems in cellular proliferation and destruction.	B. G. Firkin.	N.H. & M.R.C.
				Postgrad. Committee in Medicine.
	Clinical Research Unit, Gastro - Enterology Unit (and Department of Medicine, Univ. Sydney).	Anæmia—investigations of the mechanism of anæmia with particular reference to the anæmia of ulcerative colitis.	R. W. Beal.	Anonymous donor.
			A. P. Skyring.	N.H. & M.R.C.
			J. McRae.	
			B. G. Firkin.	
			Judith V. Wyatt.	
	Clinical Research Unit (and Department of Medicine, Univ. Sydney).	Platelet physiology—investigation of regulation of the level of circulating platelets, and the role of the platelet in coagulation and hæmostasis.	P. Castaldi.	Reginald Maney Lake and Amy Lorna Bonamy Scholarship.
			B. G. Firkin.	N.H. & M.R.C.
		Investigation of liver disease.	J. Rankin.	N.H. & M.R.C.
			J. McRae.	Postgrad. Committee in Medicine.
			C. R. B. Blackburn.	
		Studies on the effect of nialamide on ammonia metabolism.	R. W. Beal.	
			C. R. B. Blackburn.	
		Calcium metabolism.	Nancy E. Dale.	N.H. & M.R.C.
			C. R. B. Blackburn.	
Royal Prince Alfred Hospital, Camperdown, and Univ. Sydney.	Gastro-Enterology Unit and Department of Surgery.	The effects of anæsthesia on gastric secretion.	A. P. Skyring.	Postgrad. Medical Foundation.
			G. W. Milton.	
		Hormonal mechanisms in gastric secretion.	A. P. Skyring.	
			G. W. Milton.	
Royal Prince Alfred Hospital, Camperdown, N.S.W.	Gastro - Enterology Unit.	Pepsinogen and gastric secretory cell mass.	R. S. Packard.	Anonymous donor.
		Electrolyte studies in ulcerative colitis.	N. D. G. Gallagher	
		Mechanisms in fat absorption.	Judith V. Wyatt.	
		Study of methods for the estimation of electrolytes in diet and stools.	D. Harrison.	
		Clinical studies in pancreatitis.	S. J. M. Goulston.	
		Clinical studies in ileo-colitis.	R. S. Packard.	
		The early diagnosis of hæmatemesis.	A. Cooke.	
			A. P. Skyring.	
		Studies using indocyamin green as an index of hepatic function.	A. Cooke.	
			A. P. Skyring.	
Fairfax Institute of Pathology, Royal Prince Alfred Hospital, Camperdown.	Bacteriology.	(*a*) Control of cross infection in surgical wards.	P. M. Rountree.	N.H. & R.M.C.
		(*b*) Basis of bacteriophage typing of staphylococci.	P. M. Rountree.	
		(*c*) Incidence of toxoplasmosis in Sydney.	F. Jennis.	——
	Histopathology.	(*a*) Mechanisms in light-sensitivity.	V. J. McGovern.	
		(*b*) Reactions of vascular endothelium to injury.	V. J. McGovern.	Life Assurance Fund.[1]
	Gynæcological Pathology.	Incidence of occult carcinoma of the cervix in the general population and the value of a cancer detection department.	Mary Heseltine.	Postgrad. Foundation.
Hallstrom Institute of Cardiology in the Royal Prince Alfred Hospital, Camperdown.		A study of the relation between cardiac failure and coronary blood flow in man.	The Research Director Anthony D. Jose.	Life Insurance Medical Research Foundation.
		A study of familial hypercholesterolæmia—its inheritance and treatment.	Research Fellows and Staff.	Postgrad. Medical Foundation of the University of Sydney.
		A study of the determinants of mitral valve regurgitation in man.		——
		A study of myocardial electrolyte metabolism.		G. D. Searle and Co. Ltd.
King George V Hospital.	Obstetric.	Fœtal heart patterns.[2]	A. H. Bradfield.	Univ. Sydney.
				Royal Prince Alfred Hospital.
		Value of amniotomy in Rhesus-incompatible pregnancies.	W. Whiley.	——
		Evaluation of spasmolytic agents in labour.	R. S. Hyslop.	
			F. C. Hinde.	
		Evaluation of hypotensive agents in pregnancy.	R. S. Hyslop.	
			W. Whiley.	
Kanematsu Memorial Institute, Sydney Hospital.	Medical Research.	Vascular disease: lipid metabolism, fibrinolysis, blood pressure and other factors related to atherosclerosis and obesity.	W. D. Brown.	N.H. & M.R.C.
			G. Davis.	Anonymous Family Trust.
			H. M. Whyte.	Sydney Hospital.
		Vascular physiology: study of capillary circulation in the mesentery and pancreas of the rat.	A. A. Palmer.	Sydney Hospital.
			B. Herriott.	Postgrad. Medical Foundation.
				Anonymous Family Trust.
		Renal disease: metabolic studies of water, electrolytes and nitrogen, especially in starvation and anuria.	B. C. E. Ashley.	N.H. & M.R.C.
				Post-grad. Medical Foundation.
	Clinical Pathology: Morbid Anatomy. Biochemistry.	——	E. Hirst.	
		Absorption studies in man. The *d*-xylose absorption test. Differential studies with polyethylene glycol as reference substance.	F. C. Neale.	Sydney Hospital.
			B. P. Billington.	
	Bacteriology.	Pathogenesis of staphylococcal infection.	S. Fisher.	
	Hæmatology.	Investigations into the pyeloproliferative disorders.	R. J. Elvy.	State Cancer Council of N.S.W.

[1] For 1960 only.

[2] In association with the Department of Obstetrics, Univ. Sydney.

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Sydney Hospital.	Cardio-vascular Clinic.	Detailed 5-year follow-up study of the large number of hypertensive patients seen at the Cardio-vascular Clinic, with an evaluation of the influence of hypotensive therapy on mortality and morbidity. The prognostic implications of specific features such as renal function, cardiac enlargement, electrocardiographic changes, ophthalmoscopic appearances, cerebral and cardiac complications are being studied.	G. E. Bauer.	Postgrad. Medical Foundation.
	Diagnostic Radiology.	An investigation into the physiology of the biliary system, with particular reference to muscular action as judged at cineradiography, myography and manometry. The effect of surgically induced lesions on such activity, including occlusion, stricture formation, etc. The recirculation of bile and its possible role in carcinogenesis in the liver and elsewhere.	J. Dixon Hughes. J. Davis. Bryan Williams.	Univ. Sydney Postgrad. Committee in Medicine. Rotary Club of Sydney (Randwick Club).
	Gastro-intestinal Clinic.	Epidemiological studies on gastric ulcer.	B. P. Billington.	
New South Wales State Cancer Council.	Special Unit for the Investigation and Treatment of Cancer, Prince of Wales Division of Sydney Hospital.	Study of tumour stroma, with special reference to sulphated mucopolysaccharides.	J. B. Adams. M. F. Meaney.	N.S.W. Government.
		Parathyroid physiology and calcium metabolism with relation to trauma and malignant disease.	K. N. Wynne. M. T. McGoran.	N.S.W. State Cancer Council.
		Decarboxylation pathways of amino acids in cancerous hosts.	J. C. Claudatus. J. L. Gibbons.	Private donors.
		Tissue culture of tumours with studies in radiosensitivity.	M. F. Larkin.	
		Biological fractionation of isotopes: In normal and cancerous tissues. As a possible genetic "marker".	S. H. Chorlton.	
		The effect of anæsthesia on blood flow through various tissues.	G. M. Davidson.	
		Chemotherapy of cancer: Local perfusion with various chemotherapeutic agents.	A. Freedman. G. M. Davidson.	
		Total body perfusion with massive doses of chemotherapeutic agents.		
		Clinical studies on the therapy of breast cancer and melanoma malignum.	R. P. Melville. T. P. Davis.	
Prince of Wales Division of Sydney Hospital.	Surgical Research.	(1) Experiments in osteogenesis recording thermal changes in fracture area, oxygen uptake, etc. (2) Plastic adhesives for bonding of fractures. (3) Experiments in the various new materials for internal fixation of fractures.	B. Bloch. C.S.I.R.O.	Rotary Appeal. C. R. McNiven, Esq. N. Hannan, Esq. Wholesale Meat Traders' Association.
		Experimental necrosis of sheep brains and fixing a standard for diathermy coagulation.	W. Scott Charlton. James Davis.	
		Perfusion experiments with "Endoxan" on sheep.	R. P. Melville. G. Davidson. T. Davis.	
		Experimental heart-lung machine used on sheep.	A. Hobbes. T. I. Robertson. A. P. Findlay.	
		Experiments on biliary circulation on experimental animals.	J. V. L. Colman. J. Dixon Hughes. James Davis.	
		Experimental ischæmia in the wall of the descending thoracic aorta in sheep.	J. D. Wilson.	
St. Vincent's Hospital, Darlinghurst.	Medicine.	Malabsorption syndromes following gastrectomy.	W. Hennessy.	Postgrad. Medical Foundation.
		Coronary angiography.	G. Michell.	
		T-wave changes in relationship to coronary artery perfusion pressures.	A. Seldon.	
		The measurement of the extracellular fluid volume and total body water by isotopic methods.	J. Hickie.	
		The pathology of the cardiomyopathies.	P. George.	
		Electrolyte disturbances in chronic alcoholism.	J. Hickie.	The Foundation for Research and Treatment of Alcoholism.
	Medicine and Physics.	The ætiology of coronary artery disease with particular reference to isotopic lipid studies.	G. Hall. P. George.	St. Vincent's Hospital Medical Research Fund.
	Pathology.	Alkaline phosphatase metabolism and its distribution in serum proteins.	N. Korner.	
		The investigation of radioactive Congo red as a diagnostic method in amyloid disease.	J. Raby. J. Garvan. P. George.	
	Surgical.	Excision and replacement of the aortic value in animals.	H. Windsor.	Postgrad. Medical Foundation.
		The function of the sphincter of Oddi and its relationship to biliary and pancreatic disease.	T. Nash.	
		The cerebral circulation time in raised intracranial pressure.	K. Bleasel. T. Connelley. P. George.	
	Radiotherapy.	Long-term studies into the contamination of wounds with known numbers of cancer cells and the effect of therapeutic agents.	L. Atkinson. J. Garvan. —. Jenkinson.	Atomic Energy Commission. Private donor.
		Studies in circulating cancer cells.	L. Atkinson. J. Garvan.	N.S.W. Cancer Council. Private donor.
		A therapeutic trial of cytotoxic agents.	—. Ewing.	Sigma Drug Co.
	Physics.	Studies of ionic relations in the electrophysiology of heart muscle.	P. George. E. A. Johnson. (Departemnt of Pharmacology, Univ. Sydney).	
	Anæsthetics.	Cardiac output under anæsthesia with particular reference to metho-hexital.	B. Dwyer. J. O'Leary. P. George.	
	Gynæcology.	Serial biopsy in the evaluation of a response to radiation by carcinoma of the cervix.	K. McGarrity J. Garvan..	N.S.W. Cancer Council.
Royal North Shore Hospital of Sydney.	Institute of Medical Research.	Models of cytochrome oxidase; combining hæmatin *a* with proteins and detergents.	R. Lemberg.	N.H. & M.R.C. I.M.R. Funds.
		Inductive biosynthesis of bacterial cytochromes; bacterial hæmoproteins.	J. Barrett.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Royal North Shore Hospital of Sydney and Univ. N.S.W.	Institute of Medical Research and Organic Chemistry.	Chemical and enzymic studies of peroxidases in milk and leukocytes (source, rat chloroma tumours).	D. B. Morell. P. S. Clezy.	N.H. & M.R.C. I.M.R. Funds. Univ. N.S.W. Postgrad. Medical Foundation.
Royal North Shore Hospital of Sydney.	Institute of Medical Research.	Mechanism of biosynthesis of hæmatin.	W. H. Lockwood.	N.H. & M.R.C. I.M.R. Funds.
		Sodium and potassium metabolism in pregnancy.	D. Howell.	Postgrad. Medical Foundation. I.M.R. Funds.
		Comparative clinical and biochemical trial of different diuretic drugs.	A. M. Lloyd. F. J. Radcliff.	I.M.R. Funds.
		The improvement of current methods for the estimation of protein-bound iodine.	F. J. Radcliff.	
		Research into the sources of infection in superficial mycoses and the isolation of keratinophilic fungi from soil.	E. B. Durie. D. Frey.	N.H. & M.R.C. I.M.R. Funds.
		Research into the presence of air-borne fungus spores in the atmosphere of Sydney and their relationship to allergic disease.	E. B. Durie. D. Frey.	
		Reference laboratory for cultures of fungi.	E. B. Durie. D. Frey.	
Royal North Shore Hospital of Sydney and Univ. Sydney.	Institute of Medical Research and Arthritis Clinic.	Chromatographic analysis of protein metabolites in urine in collagen disorders.	P. Robinson.	Civilian Maimed and Limbless Association.
Royal North Shore Hospital of Sydney.	Arthritis Clinic.	Controlled trial of prednisolone, methyl prednisolone, triamcinolone and dexamethasone in the treatment of rheumatoid arthritis.	P. J. Benjamin. R. Robinson *et alii*.	Drug Houses of Australia.
		Evaluation of new synthetic corticosteroid SCH.4831 in the treatment of rheumatoid arthritis.	P. J. Benjamin. R. Robinson *et alii*.	Schering U.S.A.
	Institute of Medical Research.	Radiotherapy under conditions of raised oxygen tension.	W. Woods.	I.M.R. Funds.
	Unit of Clinical Investigation.	Diagnostic limits for radioiodine uptake rates. Quantitation of thyroxine suppression test of thyroid function. Quantitation of triiodothyronine suppression test of thyroid function. Relation of eye signs of Graves' disease to circulation antibodies. Thyroid suppression after I^{131} therapy. Radioiodine therapy of thyrotoxicosis and non-toxic goitre involving measurement of thyroidal radiosensitivity. Measurement of thyroidal iodine uptake soon after therapy with radioiodine. Diagnostic ten-minute radioiodine uptake test in patients receiving antithyroid drugs. Quantitative study of effect of T.S.H. on thyroidal uptake. Management of ophthalmoplegia.	F. F. Rundle. I. B. Hales. J. Myhill. I. D. Thomas. M. Croydon.	Australian Atomic Energy Commission. Postgrad. Medical Foundation, Univ. of Sydney. Public support.
		Effect of detector response functions on apparent isotope distribution. Theory of multi-channel collimated scintillation detectors. Radioisotope scanning of thyroid nodules. Scanning studies of effect of T3 and T.S.H. on thyroid differential activity. Scans after treatment of cancer with P^{32}.	J. Myhill. I. B. Hales. T. S. Reeve.	Australian Atomic Energy Commission. N.S.W. State Cancer Council.
		Experimental cardiac valve incompetence and its surgical correction.	Ian Monk. T. S. Reeve.	Life Insurance Medical Research Fund of Australia and New Zealand.
		Studies of the hæmodynamics of diseases of the mitral and aortic valves.	G. L. Donnelly.	Postgrad. Medical Foundation, Univ. Sydney.
		Research on proteins and enzymes of normal and pathological thyroid tissue.	P. G. Stanley.	N.H. & M.R.C. Rockefeller Foundation.
		Studies on circulating blood volume relevant to cancer, before, during and after radical operation and before, during and after massive chemotherapy.	F. F. Rundle. T. S. Reeve. G. D. Tracy. J. A. Myhill.	N.S.W. State Cancer Council.
		Breast survey of women of cancer age to study relationship of various clinical states of the breast to breast cancer.	F. F. Rundle. T. S. Reeve.	
		Long-term study of the swollen arm after radical mastectomy.	F. F. Rundle. T. S. Reeve.	
		Studies in the distribution of isotope-tagged Ehrlich ascites tumour cells in the mouse.	F. F. Rundle. P. C. Vincent.	British Tobacco Co. (Australia).
Royal Alexandra Hospital for Children.	Adolph Basser Institute of Cardiology.	Development of equipment for open heart surgery.	D. Cohen. V. Hercus. J. F. Farrar.	
Children's Medical Research Foundation, Royal Alexandra Hospital for Children.	Cardiac.	Survey study of the ætiology of congenital heart disease.	J. F. Farrar.	Children's Medical Research Foundation. Royal Alexandra Hospital for Children.
		Study of the causes of pulmonary hypertension in children with and without congenital heart disease.	Douglas Cohen.	
		Studies of pump-oxygenator.	Victor Hercus.	
	Laboratories.	Clinical study of children with excessive hæmolysis.	John D. Harley.	
		Investigation of: (*a*) Incidence of erythrocyte glucose-6-phosphate dehydrogenase deficiency in children of certain racial groups. (*b*) Mechanisms involved in drug-induced destruction of erythrocytes.		
		Study of reactions of blood to foreign surfaces. (*a*) Blood coagulation. (*b*) Pharmacological activity. (*c*) Physical changes in plasma proteins. (*d*) Effects on red cell membrane.	J. Margolis.	
Royal Hospital for Women, Paddington.		(1) Building of equipment for ultrasonic echographic studies of the pregnant abdomen, in association with the Commonwealth Acoustic Laboratory and the Department of Obstetrics, Univ. Sydney.	W. J. Garrett.	
		(2) The study of pregnanediol excretion in cases of repeated abortion, in association with R. P. Shearman, Department of Obstetrics, Univ. Sydney.	W. J. Garrett.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Royal Hospital for Women, Paddington.		(1) Perinatal investigation.	J. Greenwell. A. Christie.	
		(2) Respiratory function of neonates after delivery.	I. Cope.	
		(3) Fibrinolytic activity in the mother and neonate.	I. Cope.	
	Research Laboratory.	As part of a programme of fundamental organic chemical research on steroid hormones, a study of the acid- and base-catalysed rearrangements of steroidal αβ-epoxy-ketones is in progress. The main aim of this work is the development of an improved total synthesis of the hitherto inaccessible hormone aldosterone and other 18-oxygenated steroids. The present research is concerned with the key step, namely the generation of an angular aldehyde group by rearrangement of a perhydrochrysene derivative having an appropriately situated and suitably activated αβ-epoxyketone group. Model experiments are being carried out on the re-arrangement of certain substituted derivatives of 4α,5-epoxy-5α-cholestan-3-one and the corresponding 4β,5β-isomers. It is hoped to begin other projects concerned with the chemistry and biology of steroid hormones in the near future.	I. Cope. D. J. Collins (Research Director). J. J. Hobbs.	Anonymous benefactor.
The Women's Hospital (Crown Street).	Sterility Clinic.	(1) Fertility control with oral progestogens.	Alan Grant.	Schering Pty. Ltd.
		(2) Inadequate secretory endometrium. Does it exist? What histological types?	R. Bowman. Alan Grant.	——
		(3) Endometriosis treated by intermittent progestogens instead of pseudo-pregnancy.	Alan Grant. J. Murray Moyes.	Schering Pty. Ltd.
		(4) Gynæcography for diagnosis of polycystic ovaries in Stein-Leventhal syndrome.	Alan Grant. P. Deck.	——
		(5) Hydrotubation for blocked tubes at 300 mm. pressure plus cortisone.	Alan Grant. P. Deck.	
		(6) Anovulation treated by cortisone.	Alan Grant.	
		(7) Habitual aborters—blood groups.	W. McBride.	
		(8) Threatened miscarriage—quadruple blind study on effect of large doses "Proluton" depot.	W. McBride. J. Murray Moyes.	Postgrad. Committee requested.
		(9) Dysmenorrhœa. Treatment with progestogens.	Alan Grant.	Schering Pty. Ltd.
		(10) Prediction tests for abortion.	Alan Grant. W. McBride.	——
		(11) Patterns of basal temperature graphs and their significance.	Alan Grant.	
	Obstetrical.	(12) Investigation of blood pigments in liquor amnii under conditions of fœtal stress.	R. McBeth. S. Robertson.	
		(13) Investigation into causes of perinatal mortality.	S. Devenish Meares. S. Stening. R. Macbeth. J. M. Moyes. J. Newlinds.	
	Special Clinic.	(14) Investigation of the use of cytology (S.R. and R.R., Ruth Graham) in the selection of the best method of treatment of patients with carcinoma of cervix.	J. Chesterman. R. B. C. Stevenson. J. M. Moyes. L. Atkinson. S. Devenish Meares. W. McBride.	
The Royal Melbourne Hospital.		(1) Development of techniques in the main related to the phenomenon of fluorescence for the identification of the components of intra- and extracellular material.	J. D. Hicks.	Victor Hurley Medical Research Fund, The Royal Melbourne Hospital.
		(2) To continue research into (*a*) The investigation of folic acid deficiency states, with special reference to (i) methods of assay, and (ii) alcoholic and other types of liver disease. (*b*) Research into vitamin B_{12} metabolism in mal-absorption states and liver disease.	D. C. Cowling. B. Ungar.	
		(3) Investigation into wound infection in bowel surgery with emphasis on incidence, sources and chemoprophylaxis of infection.	E. S. R. Hughes. Nancy Lewis.	
		(4) Investigation of: (*a*) The extent of rebreathing in various anæsthetic techniques. (*b*) The factors influencing this. (*c*) The composition of the gas mixtures commonly inhaled by anæsthetized patients.	H. C. Newman.	
		(5) Review of median and ulnar nerve injuries treated by the Plastic Surgery Unit during 1948–1958.	Lena McEwan.	
		(6) (*a*) Classification of epithelial tumours of the skin. (*b*) Earliest histological features indicating malignancy of skin. (*c*) Effect of blocking glomerular afferent arterioles. (*d*) Development of technique for quantitative assessment of functional renal tissue. (*e*) Histopathology of deep hypothermia.	J. D. Hicks.	
		(7) (*a*) Standardization of the thermal lesion for destruction of tissue and coagulation of vessels. (*b*) Study of the significance of anatomical variations in the human brain. (*c*) Further evaluation of (i) lesions of the globus pallidus in the treatment of Parkinsonian rigidity and spasticity, and (ii) lesions of the spino-thalamic system in the treatment of intractable pain. (*d*) The extension of stereotaxic techniques to the surgery of cerebral vessels.	R. C. W. Lowe.	
		(8) Research into the relationship between renal disease and high blood pressure.	J. K. Dawborn.	
		(9) (*a*) Development of the technique for estimating gonadotrophic hormone content of urine. Application of the test to clinical diagnostic problems.	I. H. Martin.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
The Royal Melbourne Hospital.		(9) (*b*) Study of effects of pH on carbohydrate metabolism, with particular reference to diabetic acidosis.	I. H. Martin.	Victor Hurley Medical Research Fund. The Royal Melbourne Hospital.
		Experiments to measure pressures and flow rates and to study renal histology, following by-pass of the renal artery with a view to elucidating mechanisms involved in the correction of hypertension due to renal artery sclerosis.	D. G. Macleish.	
	Thoracic Surgery and Research Projects, Experimental Surgery Unit.	(1) The creation and correction of mitral insufficiency and formation of artificial mitral valves.	J. I. Hayward.	
		(2) Surgical approach to aortic valve using perfusion with hypothermia.	J. I. Hayward.	
		(3) Peripheral resistance during by-pass with hypothermia.	J. I. Hayward.	
		(4) Monitoring blood pH during cardio-pulmonary by-pass.		
		Study of the arterial grafting of mesenteric vessels.	D. R. Leslie.	
		Ætiology of ulcerative colitis.	E. S. R. Hughes.	
		Investigation of the problems associated with the by-passing of the small intestine in continuity.	A. Cuthbertson.	
		Study of total or partial occlusion of the renal artery.	D. Macleish.	
		Problems of portal-systemic encephalopathy.	G. Sinclair.	
Alfred Hospital.	Diabetic and Metabolic Unit.	Metabolism of isolated kidney.	H. G. Burger.	Dr. Henry Laurie Scholarship.
Alfred Hospital and Baker Institute.	Neuro-surgery.	Head injuries.	W. M. McDonald.	Sol Green Research Scholarship.
	Thoracic Surgery Unit.	Ventricular function.	D. Race.	Sydney W. Jones Research Scholarship.
Baker Institute.		Body fluid volume control.	F. Lumb.	Edward Wilson Research Scholarship.
Alfred Hospital and Baker Institute.	Almoner.	Social study into consequences of cardio-vascular diseases.	B. B. Thomas.	Connibere Bequest Research Scholarship.
Alfred Hospital.	Diabetic and Metabolic Unit.	Disorders of calcium metabolism.	H. D. Breidahl.	R. B. McComas Research Scholarship.
	Surgery.	Stem graft replacement of common bile duct.	I. A. Ferguson.	Victor Y. and Margaret Kimpton Research Scholarship.
	Psychiatric Unit.	Investigation into modes of abstract thinking in normal and schizophrenic subjects.	N. McConaghy.	E. H. Flack Medical Research Scholarship.
	Surgery.	Infection as cause of anuria.	J. Nayman.	James Richardson Medical Research Foundation Scholarship Fund.
Royal Children's Hospital Research Foundation (Melbourne).	Clinical Research.	Long-term follow-up of children with chronic respiratory disease, with particular reference to ætiology and therapy.	Howard E. Williams.	Royal Children's Hospital Research Foundation.
		General field: Gastro-enterological disorders with special reference to cœliac disease and fibrocystic disease of the pancreas.	Charlotte M. Anderson and other as under.	
		Individual projects:		
		(1) Intestinal mucosal lesion in cœliac disease—histology and pathogenesis.	R. R. W. Townley. V. Travers.	
		(2) Mechanism of the effect of gluten in cœliac disease.	M. Messer. R. R. W. Townley.	
		(3) Electrolyte levels in sweat in families with fibrocystic disease of the pancreas, and in chronic pulmonary disease of varying type.	Mavis Freeman.	
		(4) Chemistry and physical chemistry of mucus in fibrocystic disease of the pancreas.	P. Johansen.	National Cystic Fibrosis Association of America.
		(5) Long-term follow-up of large group of cases of fibrocystic disease of the pancreas with especial reference to: (*a*) Inhalation therapy in the treatment of chest infection, recurrent and chronic. (*b*) Family studies regarding mode of inheritance, incidence of chest and other diseases.	Charlotte M. Anderson Jean Allan.	Royal Children's Hospital Research Foundation.
		(6) Follow-up of patients with small intestinal resection or anastomosis following intestinal obstruction in the neonatal period—with especial reference to relationship of intestinal stasis to type of operation, bowel flora and subsequent malabsorption of fat and vitamins.	Charlotte M. Anderson.	
		Studies of renal function in patients with ureteric transplants into the alimentary tract.	D. McCredie. Mavis Freeman. Durham Smith.	
Royal Children's Hospital, Melbourne.	Pathology.	Tissue composition; fluid and electrolyte metabolism. (i) Epidemiology, especially aseptic meningitis. (ii) Latency in virus infection.	D. B. Cheek. I. Jack.	
		Chromosome studies in leukæmia and embryonal tumours.	J. Haylock.	Anti-Cancer Council of Victoria.
	Experimental Surgery.	Experimental cardiac surgery.	M. Cass. G. W. Westlake.	Royal Children's Hospital Research Foundation.
Royal Children's Hospital Research Foundation.	Surgical Research.	Study of congenital deformities of the rectum and anus in infants and children.	F. Douglas Stephens.	
		Vesico-ureteral reflux—study of the clinical features and causes.	F. Douglas Stephens.	
		Tissue transplantation and cellular immunology. (*a*) Mechanism of homograft rejection. (*b*) Modification of the host's response.	R. Fowler jr. M. Cass.	Royal Children's Hospital Research Foundation and Anti-Cancer Council of Victoria.
		Myelomeningoceles in infancy and childhood—survey of the problem and special studies of the urinary tract disturbances.	E. Durham Smith.	Royal Children's Hospital Research Foundation.
		Bifid ureters—A clinical, physiological and pathological study.	D. Lenaghan.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Royal Children's Hospital Research Foundation.		Study of the triad of anomalies—megaureters, absence of musculature of the abdominal wall and undescended testes.	I. Nunn.	Royal Children's Hospital Research Foundation.
		Electromagnetic recordings of the normal and abnormal urinary tracts.	D. Lenaghan. I. Nunn.	
		Microdissection of the normal kidneys, and of the kidneys of patients whose ureters exhibit vesico-ureteric reflux.	Dora Bialestock.	
		A clinical and pathological investigation of hydronephrosis associated with the so-called "aberrant" vessel.	John S. Barnett.	
		Congenital anomalies in horseshoe kidneys—clinical and pathological review.	P. Tuckfield.	
		Talipes equino-varus—study of untreated pathological specimens and progressive clinical survey of 100 affected feet.	D. Schlicht.	
Royal Children's Hospital, Melbourne.	Hæmatology Research Clinic.	Study of leukæmia in childhood, with particular reference to: (*a*) Possible ætiological factors. (*b*) Chemotherapeutic trials. (*c*) Prognostic factors. (*d*) Special forms, e.g. CNS leukæmia, thymic enlargement, erythroleukæmia. (*e*) Pathology.	J. H. Colebatch. A. L. Clark. L. I. Taft.	Anti-Cancer Council of of Victoria.
		Chemotherapy for malignant reticuloses and tumours.	J. H. Colebatch. A. L. Clark.	
		Assessment of measures for the prevention of anæmia in thalassæmia major.	J. H. Colebatch.	Royal Children's Hospital Medical Research Foundation.
		Splenectomy and subsequent severe infections: a study of their relationship.	Margaret Horan. J. H. Colebatch.	
		Neonatal and idiopathic thrombocytopenic purpura: an enquiry into their causes, treatment and prognosis.	J. H. Colebatch.	
Royal Women's Hospital Melbourne.	Obstetrics.	Study of the clinical aspects of repeated abortion with special reference to the use of the newer progestogens and bleeding factors.	W. Rawlings.	——
	Obstetrics and Pathology.	Study of urinary pregnanediol excretion in the above.	W. Rawlings. V. Krieger.	
	Univ. Department of Obstetrics and Gynæcology.	See University of Melbourne report.		
	Anæsthetics.	Suxamethonium extension by tetrahydroaminacrine.	K. McCaul. K. Robinson.	Royal Women's Hospital.
		Influence of thiopentone and muscle relaxant drugs on the neonatal respiratory response.	P. Maplestone.	
		The use of nicotine as a respiratory stimulant.	K. McCaul.	
		An evaluation of the use of epidural analgesia in the treatment of prolonged labour.	K. McCaul. N. de Garis. P. Jeffery.	
		The decurarizing activity of tetrahydroaminacrine.	K. McCaul. K. McCaul. P. Maplestone.	
	Pathology.	(1) Hæmorrhagic meningo-encephalitis of the newborn. (2) Mesodermal mixed tumours.	H. F. Bettinger.	No special grants—supported by Hospital.
		(1) Prevention of staphylococcal infection. (2) Bacteriology of the cord and umbilicus.	H. Butler.	
		(1) An investigation of the relationship between hormone patterns in smears and the level of pregnanediol in pregnancy (in conjunction with W. Rawlings and V. Krieger). (2) An investigation to determine the value of smear patterns in pregnancy in forecasting the probability of subsequent abortion. (3) An investigation of the value of the smear pattern in the management of cases of apparent post-maturity (in conjunction with E. V. Mackay). (4) The mitotic patterns in invasive squamous cell carcinoma of the cervix. (5) The development of the method for enumerating and classifying human chromosomes by short-term blood culture.	G. Jacob.	
		(1) Studies on the nature of the binding of bile pigments to tissue and plasma proteins. (2) The effects of triiodothyronine on the plasma bile pigments and neonatal development of the premature infant (in conjunction with T. Maddison). (3) An assessment of the value of the cortisone-stress intravenous glucose tolerance test in the diagnosis of "preclinical" diabetes during pregnancy (in conjunction with P. Taft). (4) The development of a chemical method for estimating urinary formiminoglutamic acid after histidine loading, as a test of folic acid deficiency.	D. Watson.	
		(1) Methods of diagnosis and the causative factors for folic acid deficiency and the megaloblastic anæmias in pregnancy. (2) The frequency and significance of thalassæmia and the abnormal hæmoglobin syndromes in pregnancy. (3) Studies of the hæmodilution phenomenon in pregnancy.	M. Whiteside.	
Fairfield Infectious Diseases Hospital.		Specialized clinical and laboratory investigation of virus diseases including epidemiological aspects.	Permanent Hospital Medical Staff.	Victorian Government.
		Investigation in specialized management of acute infections, particularly those involving the central nervous system and those with respiratory paralysis.		
		Serological surveys of occupational infection.	In conjunction with Victorian Health Department.	
Prince Henry's Hospital, Melbourne.	Pathology.	Antigenicity of malignant tissues: The antigenic properties of extracts prepared from malignant and normal areas of the same tissue or organ removed at operation are being compared by means of the Schultz-	S. Wiener.	Anti-Cancer Council of Victoria.

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Prince Henry's Hospital, Melbourne.	Pathology.	Dale technique. Results obtained so far indicate that the antigens of some malignant tissues are indistinguishable from those present in normal tissues, whilst in others evidence of a gain in one or more antigens has been obtained. The effect of ischæmia on tissue antigens. In order to elucidate the mechanism by which neoplastic tissues gain additional antigens, a comparison is being made of the antigenic composition of ischæmic and corresponding normal tissues. The effect of X-rays on antibody response. A study has been commenced on the effects of whole-body radiation in modifying the ability of guinea-pigs to become sensitized to foreign proteins.	S. Wiener.	Anti-Cancer Council of Victoria.
Austin Hospital, Heidelberg.	Cancer Unit.	Investigation of the immune response of cancer patients to injections of killed tissue cultured cells, and an examination of the serum for protein alteration during processes of cancer extension and/or remissions. Investigation of morphine and its side effects. The development of partial antagonists to these side effects. Investigation of new compounds for their analgesic effect comparable to morphine. Investigation of urines to determine the presence of specific substances in cancer.	P. L. Bazeley. F. H. Shaw. W. J. Moon. —. Morgan.	
	Spinal Unit.	Investigation of tigloidine in the treatment of spastic paraplegia.	F. H. Shaw. D. W. Bruce. D. J. E. Cheshire.	
Royal Hobart Hospital.	Allergy and Pathology. Orthopædic.	Anaphylactic tests for carcinoma. Review of end results of operative treatment of osteoarthritis of hip joint by operation. Review of end results of fractures of (*a*) os calcis, (*b*) shaft of femur, (*c*) neck of femur, (*d*) tibia, (*e*) supracondylar fractures of elbow (treated over last 15 years). Investigation of surgical tuberculosis occurring in southern Tasmania (over ten-year period ending 1950).	P. S. Clarke. D. W. L. Parker. W. Brown Law. D. W. L. Parker. W. Brown Law. D. W. L. Parker.	Board of Management.
Launceston General Hospital.	Orthopædic.	Review of results of treatment of C.D.H. (over last 15 years).	D. W. L. Parker. T. H. Hogg.	
The Institute of Clinical Pathology and Medical Research, Lidcombe, N.S.W.	Public Health (N.S.W.).	Virology Department: (1) Survey of viruses associated with gastroenteritis in children. (2) Acute respiratory virus infections in Sydney (in collaboration with the Research Committee, College of General Practitioners, New South Wales Faculty). (3) Time-lapse cinematographic studies of cells in tissue culture infected with viruses. Bacteriology Department: (1) Neonatal staphylococcal infections (in collaboration with Grace Cuthbert Browne and Maureen Grattan-Smith, Division of Maternal and Baby Welfare, New South Wales Department of Public Health). (2) Bacteriological control of clinical trial of 1314 TH Trescatyl (in collaboration with the Division of Tuberculosis, New South Wales Department of Public Health). Hæmatology Department: (1) Serum vitamin B_{12} levels in various chronic illnesses. (2) Attempt to develop microbiological assay methods for estimating folic acid levels in serum. (3) Attempts to develop improved methods for preserving blood specimens for hæmatological investigations. Biochemistry Department: (1) Development and refinement of methods for: (*a*) The determination of serum iron and latent iron binding capacity. (*b*) The determination of total cholesterol in serum. (*c*) The photo-chemical determination of low chloride ion concentrations. (*d*) Estimation of catechol amines in urine. (*e*) The direct colorimetric determination of urea. (2) Adaptation for clinical biochemical purposes of: (*a*) Techniques of starch gel and continuous electrophoresis. (*b*) Chromographic analysis of amino acids and hormones. (3) Attempts to develop liver function tests based on: (*a*) Arginase activity in blood. (*b*) Acetylation of sulphonamides in vivo. (4) Evaluation of D-xylose loading test as a guide to maladsorption. (5) Ultracentrifugal fractionation of I^{131} labelled serum lipids in patients with coronary occlusion (in collaboration with G. V. Hall and E. P. George, St. Vincent's Hospital, Darlinghurst).	A. M. Murphy. N. Martin. A. M. Murphy. N. Martin. H. Kramer. A. M. Murphy. R. G. Hill. D. Hansman. A. M. Vickery. D. Hansman. B. F. O'Connor. B. J. Arnold. H. Lawson-Smith. B. J. Arnold. B. J. Arnold. H. Lawson-Smith. R. N. Beale. J. O. Bostrom. R. F. Taylor. R. N. Beale. D. Croft. R. N. Beale. D. Croft. R. N. Beale. D. Croft. R. N. Beale. D. Croft. R. N. Beale. J. O. Bostrom. R. N. Beale. R. F. Taylor. R. N. Beale. R. N. Beale. J. O. Bostrom. R. F. Taylor. D. Croft.	Department of Public Health.
State Hospital, Lidcombe.	Public Health.	(1) Lipid metabolism in old age: the emulsifying ability of human sera. (2) Survey of geriatric skin conditions and physiopathology of the aging skin.	B. Breyer. F. Ofner. E. Kocsard *et alii*.	Department of Public Health.

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
N.S.W. Department of Public Health.	Division of Occupational Health.	(1) The extent and nature of atmospheric pollution in Port Kembla and its effects upon the health of the residents. (2) The extent of occupational deafness in New South Wales industry with particular reference to the scientific assessment of the working environment. (3) The industrial causes of tenosynovitis. (4) Efficiency correlations of industrial hygiene sampling instruments. (5) Determination of normal values for pulmonary function tests in an industrial population. (6) Extent and nature of air pollution at street levels in Sydney. (7) Methods of evaluating atmospheric smoke density measurements.	Alan Bell. J. L. Sullivan. H. R. Weston. N. J. C. Peres. A. T. Jones. Alan Bell. J. L. Sullivan. P. J. Collin. J. L. Sullivan.	Department of Public Health.
Government Analyst's Branch.	Public Health.	(1) Storage survival of *B. coli*, enterococci and salmonella organisms in water samples. (2) Development of test to distinguish between human and animal pollution in water—enterococci typing. (3) Bacterial pollution of closed-circuit swimming pools under peak loads. (4) Bacterial pollution of stream water in N.S.W. Expected duration of project, 1960–1962. Toxicological research: Recovery, identification and estimation of drugs and poisons in biological tissue (chiefly human). This involves not only the modification and adaptation of methods originally designed for use in agricultural and other fields, but an attempt to devise suitable methods beyond the scope of those already available.	J. K. Brown. V. C. Mahoney.	Department of Public Health.
North Ryde Psychiatric Centre.	Public Health.	Chromosome abnormality in relation to mental defectives. Incidence of metabolic anomalies with particular reference amino-acidurias in mentally defective children.	B. Turner. B. Turner. A. Jennings. M. Juster.	Division of State Psychiatric Services, Department of Public Health.
Admission Centre, Darlinghurst.	Public Health.	Bromuride preparations.	W. Trethowan. T. Pawloff.	
Broughton Hall.	Public Health.	Effects of "Tofranil" on depression.	W. Trethowan. B. Leabeater.	
Callan Park.	Public Health.	Effects of amphetamine. Features of addiction to amphetamine. Features of amphetamine psychosis.	W. Trethowan. D. Bell. W. Trethowan. D. Bell. W. Trethowan. D. Bell.	
North Ryde.	Public Health.	Notes on a therapeutic community, No. 1. Notes on a therapeutic community, No. 2. An example of telepathic problem solving. Group psychotherapy of schizophrenics. Research in social psychiatry.	N. T. Yeomans. N. T. Yeomans. N. T. Yeomans. N. T. Yeomans. N. T. Yeomans. In association with the Univ. N.S.W.	
Callan Park.	Public Health.	Investigation of epilepsy, particularly the psychiatric aspect. Part I. Clinical investigation within the Division of State Psychiatric Services. Part II. W.H.O. Travelling Fellowship awarded to permit further training and research in England and the Continent. Further studies in the U.S.A.	D. Bell.	W.H.O. & Division of State Psychiatric Services, Department of Public Health. D.S.P.S.
C.S.R.U.	Public Health.	Design of apparatus for the measurement of, and the study of critical flicker fusion frequency in neuropsychiatric illness. Clinical evaluation of acetazolamide in psychomotor epilepsy. Special chair assembly for pneumoencephalography. Studies of the electrophoretic patterns of the cerebrospinal fluid in neuropsychiatric illness. Development of a logically programmed test apparatus for evaluation of visuo-motor and intelligence functions in brain-damaged patients. Multidisciplinary assessment of a new monoamine oxidase inhibitor. A study of E.E.G. changes occurring after administration of M.A.O. inhibitors. Studies in intracerebral coagulation in Parkinson's disease. A new method of recording fine muscular movements. Studies in epilepsy (E.S. 1), Parts I, II and III. "Siquiline" (fluophenazine) in psychiatric practice. Investigation of the significance of 6 c.p.s. activity in the E.E.G. of psychomotor epileptics. Multidisciplinary study of temporal lobe epilepsy.	C.S.R.U. O. Pawloff. J. Wilcox. A. Throsby. C.S.R.U. Staff. C.S.R.U. Staff. C.S.R.U. Staff. C.S.R.U. Staff. C.S.R.U. Staff. C.S.R.U. Staff. C.S.R.U. Staff. C.S.R.U. Staff. C.S.R.U. Staff. C.S.R.U. Staff. C.S.R.U. Staff. C.S.R.U. Staff.	
Cancer Institute Board (Victoria).	Radiobiological Research.	Radio-protection and radio-sensitization of normal and neoplastic tissues, with particular reference to the oxygen effect factor in vivo and in vitro. Pharmacological aspects of radio-protective chemical action and oxygen poisoning. Clinical applications of high pressure oxygen in radiotherapeutic treatment.	A. A. S. van den Brenk. R. Moore. D. Jamieson. D. Chalmers.	Cancer Institute Board (Salaried Research Workers).
	Physics.	The development of a technique for diagnosing benign and malignant intraocular melanomata using radioactive phosphorus.	K. H. Clarke. R. de Groot.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Cancer Institute Board (Victoria).	Physics.	The effect on radiation absorption of inhomogeneities in the human body.	E. C. Winkler.	Cancer Institute Board (Salaried Research Workers).
		Studies of the lymph flow rate in normal arms and œdematous arms after mastectomy.	K. H. Clarke.	
		Preliminary studies in electron beam dosimetry.	K. L. Biggs.	
		The use of pulse-height analysis techniques in the clinical application of radioisotopes.	R. de Groot.	
		Studies on the mineralization of bone.	J. McKay.	
	Pathology.	Causes of anæmia in malignancy investigating ferrodynamics, biochemistry and histopathology.	R. Motteram. I. C. Parsons.	
		Protein changes in malignant lymphomas and myeloma.	J. Upfill.	
Mental Hygiene Authority, Victoria.	Mental Health Research Institute.	(i) Further studies in the epidemiology of mongolism in Victoria, 1942–1957.	R. D. Collmann. A. Stoller.	No external funds.
		(ii) Incidence of congenital defects of the C.N.S. in Melbourne, 1942–1957.	R. D. Collmann. A. Stoller.	
		(iii) Comparative studies of aging in mental hospital, general hospital and community settings—social, psychological, E.E.G. and general clinical evaluations.	K. Andermann. G. V. Davies. H. A. Hohne. A. Moriarty. A. Stoller.	
		(iv) Changes in patterns of admissions, discharges, deaths and resident patients in mental hospitals in Victoria from 1900 to 1958.	J. Krupinski. A. Stoller.	
		(v) A study of the effects of industrial training on the personality of mentally defective adolescents in Oakleigh Day Training Centre.	R. Banchevska. K. Cathcart. P. Kaufman.	
		(vi) A review of testing imbecile children with Minnesota Scale and Speech Sounds Test.	K. Cathcart. J. A. Lyle.	
		(vii) A new children's projective technique: Rejection-Reaction Scale.	J. A. Lyle.	
	Royal Park Receiving House.	(i) Epidemiological study of the incidence of mental illness in migrant and native-born populations.	J. Cade.	
		(ii) Experimental studies in the evaluation of psychiatric art.	J. Gooday. H. Hohne.	
	Neuropathological Laboratory, Royal Park.	(i) Investigation of "metabolic activity granules"—the result of a new staining method.	J. Mackiewicz.	
		(ii) Pharmacological and neuropathological effects of imipramine ("Tofranil") and trifluoperazine ("Stelazine") on younger and older animals.	J. Gershon. J. Mackiewicz.	
	Observatory Clinic.	(i) Study of the value of imipramine in the treatment of enuresis.	R. G. Maclean. C. Noack.	
		(ii) Comparison of two therapeutic regimes in the treatment of depression—"Marplan" and "Trilafon" *v.* "Tofranil" and "Trilafon".	R. G. Maclean. C. Noack.	
	Mont Park Mental Hospital.	The effect of a combination of trifluoperazine ("Stelazine") and tranylcypromine ("Parnate") in chronic schizophrenia.	H. Hohne. A. Hordern. D. Somerville.	
	Neurosurgical Unit, Mont Park.	(i) Six-year follow-up of 250 leucotomized patients.	H. Hohne. G. Miller. K. Walsh.	
		(ii) Investigation of higher E.E.G. frequencies through multi-track tape-recording techniques.	K. Andermann. H. Bratspies.	
		(iii) Investigation of the significance of the alpha spectrum as obtained through two coupled wave-analysers.	K. Andermann. H. Bratspies. C. Gordon.	
		(iv) A new method of ensuring the stability of wave-analysers for clinical work in conjunction with E.E.G.	H. Bratspies. C. Gordon.	
		(v) A study of electrocoagulation techniques and design of depth electrodes in neurosurgery.	H. Bratspies.	
	Alexandra Clinic.	(i) A double-blind study of the value of "Librium" in the treatment of alcoholics.	A. A. Bartholomew.	
		(ii) Pilot analysis of wife-husband interaction in cases of male alcoholic addiction.	A. A. Bartholomew. M. Kelley.	
		(iii) Standardization of the Maudsley Personality Inventory in Australian population groups.	A. A. Bartholomew.	
	Pentridge Psychiatric Clinic.	Pilot evaluation of group therapy with committed psychiatric patients in a prison setting.	G. Alison-Levick.	
	Kew Cottages.	(i) Survey of phenylpyruvia in Victoria.	D. B. Pitt.	
		(ii) Toxoplasmosis and brain damage.	D. B. Pitt. M. Wilson.	
		(iii) Survey of mental deficiency syndromes in Kew Cottages.	D. B. Pitt.	
		(iv) Cephalometry in mental deficiency syndromes.	G. Harris. D. B. Pitt.	
Laboratory of Microbiology and Pathology.	Department of Health and Home Affairs, Brisbane.	The laboratory is the WHO Leptospiral Reference Laboratory for Australasia.	D. J. W. Smith.	Nil.
		Investigations into serology of pyrexias of unknown origin.	Various staff members.	
		Serology of "Q" fever and leptospirosis.	Various staff members.	
South Australian Department of Public Health.	School Health Services.	Evaluation of the effects of our high fluoride water supply on the teeth of children. The water supply concerned that which supplies Port Lincoln, S.A. It is supplied from an underground basin, the Uley-Wanilla basin, and contains approximately 1 p.p.m. fluoride in the form of sodium salt.	School dentists and members of University teaching staff.	South Australian Government.
Division of Mental Health (Headquarters), Tasmania.	Department of Health Services.	Some psychological and social characteristics of the certified mentally defective population in Tasmania.	J. Kraus.	
Department of Health Services, Tasmania.	Public Health Division.	Epidemiology of endemic goitre.	Public Health Division Staff. F. W. Clements.	Government funds.
		Possible association of dental caries with supplementary services of vitamin C.	Public Health Division Staff.	
		Incidence of leptospirosis in abattoir workers.	ublic Health Division Staff. School of Hygiene, Univ. Sydney.	
		Routine dietary surveys in primary and secondary schools.	Public Health Division Staff.	

Institution.	Department.	Project.	Principal Workers.	Source of Grant or Support.
Queensland Institute of Medical Research.	Bacteriology.	Atypical mycobacteria in Queensland.	E. Singer. Gwenda M. J. Rodda.	Queensland Government.
	Mycology.	Survey of dermatophytes.	Mary F. Ridley.
		Studies of *Candida albicans*.	Mary F. Ridley.
		Natural habits of fungi pathogenic for man.	Mary F. Ridley.
	Serology.	Survey of melioidosis in man and animals.	I. Cook.	N.H. & M.R.C.
		Toxoplasma infections in man and animals.	I. Cook.	Queensland Government.
	Virology.	Murine typhus and "Q" fever.	E. H. Derrick. J. H. Pope.
		E.M.C. virus in animals and man.	J. H. Pope.
		Chronic cirus infections of mice.	J. H. Pope.
	Epidemiology.	Studies of arthropod-borne viruses.	R. L. Doherty. J. G. Carley.
		Virus isolations from clinical material.	R. L. Doherty. J. G. Carley.
	Innisfail Field Station.	Epidemiology of leptospirosis.	J. L. Harrison. Marie L. Emanuel.
	Parasitology.	Epidemiology and treatment of hookworm infestations.	M. J. Mackerras.
		Survey of tapeworm infestations in man.	D. F. Sandars.
		Studies of parasites of native animals.	M. J. Mackerras. D. F. Sandars.
	Entomology.	Simuliidæ and mosquitoes.	M. J. Mackerras.
		Tabanidæ.	I. M. Mackerras.
		Acarina.	R. Domrow.
		Epidemiology of asthma.	E. H. Derrick.
Institute of Medical and Veterinary Science, Adelaide.	Hæmatology.	(1) (*a*) Development of a test for the estimation of platelet thromboplastic function. (*b*) Use of this test in the management of thrombocytopenic patients (idiopathic thrombocytopenic purpura, acute leukæmia and aplastic anæmia). (*c*) Extension of this test to measure (i) quantitative assay of Prower-Stuart factor; (ii) the presence of an inhibitor in hæmophilic plasma.	J. A. Bonnin. K. Cheney.	Institute of Medical and Veterinary Science funds: State Government subsidy.
		(2) Survey of the anæmias of pregnancy, with special reference to the hæmoglobinopathies and thalassæmia. A method has been devised for the quantitative assay of the A_2 component of hæmoglobin by paper electrophoresis.	R. N. Ibbotson. B. Crompton.	Supported by a grant from N.H. & R.M.C.
	Biochemistry.	(1) Developing and improving the method for the estimation of quinine oxidase in plasma. (A raised level has been found to be virtually specific for hepatocellular damage).	W. Roman. C. Nader. D. Bubela.	Institute of Medical and Veterinary Science funds.
		(2) A survey of the electrophoretic patterns of the serum proteins in cirrhosis of the liver.	W. Roman. I. Forbes. R. Pain.
	Medical Research.	Investigation of complement-fixing and precipitating human autoantibodies and correlation of the results with clinical findings. Passive transfer of some of the specific reactions of human autoantibodies to the tissues of experimental animals.	Earle Hackett. Edith Gardonyi. Margaret Beech.
		Investigation of the blood coagulation mechanisms of various amphibia, reptiles and fishes.	Earle Hackett.
		Investigation of the carcinogenic effects of ultra-violet irradiation on mice.	Graham Carmichael.
	Bacteriology.	Salmonella Reference Laboratory: (*a*) Research into the bacteriology of coconut and other foodstuffs. (*b*) Efficiency of various enrichment media for the isolation of gastro-intestinal pathogens.	M. Gibbs. K. Anderson.	N.H. & R.M.C.
		Staphylococcal toxins including enterotoxin. The separation and identification by a variety of techniques.	J. R. Coulter.	Institute of Medical and Veterinary Science funds.
		Staphylococcal bacteriophage.	Frances McDonald.
		Efficacy of the new penicillins. An in-vitro study.	K. Anderson.
Public Health Department and Fremantle Hospital, Perth, W.A.	Public Health Laboratory Service.	A study of disease in coronary arteries and of coronary heart disease with particular reference to the significance of intercoronary anastomoses.	J. D. Woods. J. H. Stirrat. W. Laurie.	Western Australian Government.
		(*a*) A study of disease resembling progressive pulmonary tuberculosis caused by unclassified mycobacteria Group III.	N. Kovacs.
		(*b*) Research to improve methods for detection of salmonellæ especially in foodstuff.	N. Kovacs.
The Australian College of General Practitioners.	Research Committee of Council.	National morbidity survey.	25 volunteers.	Medical Statistics Committee, N.H. & M.R.C.
		Survey of Australian general practice.	C. C. Jungfer.	Commonwealth Department of Health.
		Accident survey.	10 volunteers.	In conjunction with College of General Practitioners.
	Queensland Faculty.	Asthma in childhood.	Volunteers.	Nil.
	N.S.W. Faculty.	Endemic virus observation.	Six volunteers.	Institute of Pathology, Department of Health, N.S.W.
	Victorian Faculty.	Swimming pool infections.	Volunteers.	Public Health Laboratory.
		Epidemic observation unit: early detection of influenza.	Volunteers.	
		Study of effect of treatment on early hypertension.	McQ. Thomson.	Nil.
		Staphylococcal breast infection.	Volunteers.	
		Serological survey of brucellosis and leptospirosis.	Corryong practitioners.	Department of Health.
	Tasmania Faculty.	Recurrent furunculosis: trial of various methods of treatment.	Volunteers.	Nil.
	S.A. Faculty.	Therapeutic evaluation of parenteral trypsin.	Volunteers.	
		Survey of incidence of psychiatric disorders.	Volunteers.	
		Study of the chromosome pattern in mongolism and other congenital defects.		Department of Genetics, Univ. Adelaide.
Univ. Sydney.	Medicine.	Respiratory physiology and the pulmonary circulation.	D. F. J. Halmagyi.	Adolph Basser Research Fellowship of The Royal Australasian College of Physicians.
Univ. Western Australia.	Medicine.	Gastro-enterology.	R. A. Joske.	
Univ. Sydney.	Medicine.	Cardio-pulmonary disease.	Boleslaw Starzecki.	Roche Research Fellowship of The Royal Australasian College of Physicians.